



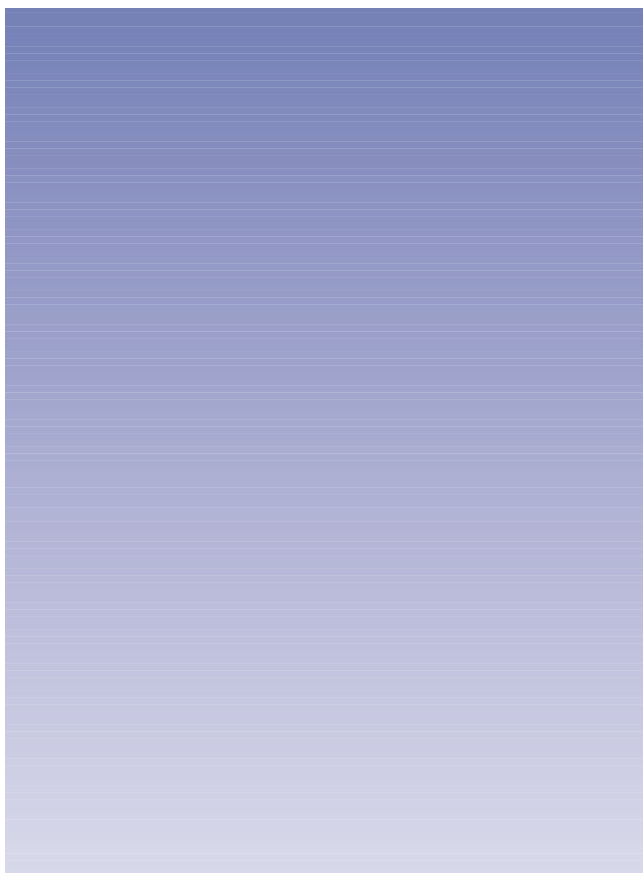
# COLOR TELEVISION RECEIVER

Chassis : KS4A(P)

Model : WS32W68AS9XXEC

# ***SERVICE*** *Manual*

## COLOR TELEVISION RECEIVER



## CONTENTS

1. Precautions
2. Reference Information
3. Specifications
4. Alignment and Adjustments
5. Exploded Views and Parts List
6. Electrical Parts List
7. Block Diagrams
8. Schematic Diagrams

# 1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

## 1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):  
Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

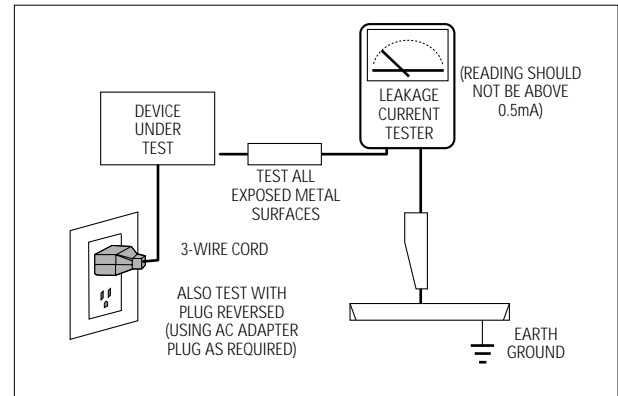




Fig. 1-1 AC Leakage Test

6. Antenna Cold Check:  
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. X-ray Limits:  
The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. High Voltage Limits:  
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced.  
(X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

## 1-1 Safety Precautions (Continued)

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9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
10. Design Alteration Warning:  
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
11. Hot Chassis Warning:  
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.  
  
To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
16. Picture Tube Implosion Warning:  
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
18. Product Safety Notice:  
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.  
  
Components that are critical for safety are indicated in the circuit diagram by shading, () or ().  
Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications.  
A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

## 1-2 Servicing Precautions

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Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to:  
(a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.  
  
The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.



### 1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

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1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static"; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

## 2. Reference Information

### 2-1 Tables of Abbreviations and Acronyms

Table 2-1 Abbreviations			
A	Ampere	MV	Megavolt
Ah	Ampere-hour	MW	Megawatt
Å	Angstrom	MΩ	Megohm
dB	Decibel	m	Meter
dBm	Decibel Referenced to One Milliwatt	μA	Microampere
°C	Degree Celsius	μF	Microfarad
°F	Degree Fahrenheit	μH	Microhenry
°K	degree Kelvin	μm	Micrometer
F	Farad	μs	Microsecond
G	Gauss	μW	Microwatt
GHz	Gigahertz	mA	Milliampere
g	Gram	mg	Milligram
H	Henry	mH	Millihenry
Hz	Hertz	ml	Milliliter
h	Hour	mm	Millimeter
ips	Inches Per Second	ms	Millisecond
kWh	Kilowatt-hour	mV	Millivolt
kg	Kilogram	nF	Nanofarad
kHz	Kilohertz	Ω	Ohm
kΩ	Kilohm	pF	Picofarad
km	Kilometer	lb	Pound
km/h	Kilometer Per Hour	rpm	Revolutions Per Minute
kV	Kilovolt	rps	Revolutions Per Second
kVA	Kilovolt-ampere	s	Second (Time)
kW	Kilowatt	V	Volt
l	Liter	VA	Volt-ampere
MHz	Megahertz	W	Watt
		Wh	Watt-hour

Table 2-2 Table of Acronyms

ABL	Automatic Brightness Limiter	I/O	Input/output
AC	Alternating Current	L	Left
ACC	Automatic Chroma Control	L	Low
AF	Audio Frequency	LED	Light Emitting Diode
AFC	Automatic Frequency Control	LF	Low Frequency
AFT	Automatic Fine Tuning	MOSFET	Metal-Oxide-Semiconductor-Field-Effect-Tr
AGC	Automatic Gain Control	MTS	Multi-channel Television Sound
AM	Amplitude Modulation	NAB	National Association of Broadcasters
ANSI	American National Standards Institute	NEC	National Electric Code
APC	Automatic Phase Control	NTSC	National Television Systems Committee
APC	Automatic Picture Control	OSD	On Screen Display
A/V	Audio-Video	PCB	Printed Circuit Board
AVC	Automatic Volume Control	PLL	Phase-Locked Loop
BAL	Balance	PWM	Pulse Width Modulation
BPF	Bandpass Filter	QIF	Quadrature Intermediate Frequency
B-Y	Blue-Y	R	Right
CATV	Community Antenna Television (Cable TV)	RC	Resistor & Capacitor
CB	Citizens Band	RF	Radio Frequency
CCD	Charge Coupled Device	R-Y	Red-Y
CCTV	Closed Circuit Television	SAP	Second Audio Program
Ch	Channel	SAW	Surface Acoustic Wave(Filter)
CRT	Cathode Ray Tube	SIF	Sound Intermediate Frequency
CW	Continuous Wave	SMPS	Switching Mode Power Supply
DC	Direct Current	S/N	Signal/Noise
DVM	Digital Volt Meter	SW	Switch
EIA	Electronics Industries Association	TP	Test Point
ESD	Electrostatic Discharge	TTL	Transistor Transistor Logic
ESD	Electrostatically Sensitive Device	TV	Television
FBP	Feedback Pulse	UHF	Ultra High Frequency
FBT	Flyback Transformer	UL	Underwriters Laboratories
FF	Flip-Flop	UV	Ultraviolet
FM	Frequency Modulation	VCD	Variable-Capacitance Diode
FS	Fail Safe	VCO	Voltage Controlled Oscillator
GND	Ground	VCXO	Voltage Controlled Crystal Oscillator
G-Y	Green-Y	VHF	Very High Frequency
H	High	VIF	Video Intermediate Frequency
HF	High-Frequency	VR	Variable Resistor
HI-FI	High Fidelity	VTR	Video Tape Recorder
IC	Inductance-Capacitance	VTVM	Vacuum Tube Voltmeter
IC	Integrated Circuit	TR	Transistor
IF	Intermediate Frequency		

## 2-2 IC Line Up

Block	Des-Loc	Part-Number	IC Name	Description
<b>MAIN</b>	IC601	1204-001775	MSP3410G-C5	IC-SOUND PROCESSOR
	IC701	1001-001073	TEA6415C	IC-VIDEO SWITCH
	IC702	1001-001113	TEA6422	IC-AUDIO SWITCH
	IC703	1002-001193	PCF8591P	IC-A/D & D/A CONVERTER
	TU01	AA40-00017A	TCLN318PA09A(S)	TUNER-F/S "PAL B/G D/K,I,M,T R,181CH"
	TUP01	AA40-00019A	TCPN3081PC09A(S)	TUNER-F/S "PAL B/G D/K,I,M,T R,181CH"
	IC905	1103-001213	M24C16	IC-EEPROM
	ICG01	0801-000314	74HCT86	IC-CMOS LOGIC
	ICS02	1204-001113	TEA6422	IC-AUDIO SWITCH
	IC602	1201-000407	TDA7050	IC-POWER AMP
	IC603	1201-001026	TDA7265	IC-POWER AMP
	IC804	1203-000203	SI3050	IC-POSI.ADJUST REG.
	IC805	1203-000203	SI3050	IC-POSI.ADJUST REG.
	ICS01	1201-001114	TEA6425	IC-VIDEO SWITCH
	IC802	1203-000293	KA7808	IC-POSI.FIXED REG.
	IC803	1203-000298	KA7809	IC-POSI.FIXED REG.
	IC101	1001-001038	SAA1300	I/O PORT
	ICD02	1201-000191	4558	IC-OP AMP
	ICD603	1201-001026	TDA7265	IC-POWER AMP
	ICS03	1001-000223	TEA5114A	IC-VIDEO SWITCH
	IC801	1203-000165	78R12	IC-POSI.ADJUST REG.
<b>POWER</b>	IC301	1204-000517	LA7845	IC-VERTICAL DEF.
	IC403	1202-000103	LM393	IC-VOLTAGE COMP.
	IC801S	AA13-00018A	STR-F6656	IC-HYBRID
	IC803S	AA13-00024A	TNY253P	IC-HYBRID
	QH04	0502-000442	2SC4636RB	TR-POWER
	Q403	0505-000156	IRF620	FET-SILICON
	Q404	0505-001116	BUZ73A	FET-SILICON
	Q405	0502-001175	2SC5446	TR-POWER
	Q801	AA13-20004H	SE135N-LF12	IC-HYBRID

Block	Des-Loc	Part-Number	IC Name	Description
<b>F-BOX</b>	IC01	1204-001598	VPC3230D-A0	IC-VIDEO PROCESS
	IC02	AA13-00095A	SDP01	IC-ASIC
	IC05	1204-001599	DDP3310B-F5	IC-VIDEO PROCESS
	IC03	1105-001273	416S1120	IC-DRAM
	IC04	1105-001273	416S1120	IC-DRAM
	PIC01	1204-001658	SDA9489X-B22	IC-PICTURE PROCESS
	PIC02	1203-001419	4931	IC-VOLTAGE REGULATOR
	IC15	1203-000515	7042	IC-VOL. DETECTOR
	IC11	1203-001419	4931	IC-VOLTAGE REGULATOR
	IC12	1203-001140	7039	IC-VOL. DETECTOR
	IC13	1203-001359	1086	IC-POSI.FIXED REG.
	IC14	1203-000188	7033P	IC-POSI.ADJUST REG.
<b>CRT</b>	IC501	1201-001131	TDA6111Q	IC-VIDEO AMP
	IC502	1201-001131	TDA6111Q	IC-VIDEO AMP
	IC503	1201-001131	TDA6111Q	IC-VIDEO AMP
	QF10	0502-000153	2SC2344-D	TR-POWER
	QF09	0502-000131	2SA1011-D	TR-POWER
	IC504	1201-000010	2030	IC-OP AMP
<b>DOLBY</b>	IC601	1204-001198	DPL3519A-A2	IC-DECODER
	IC602	1201-000541	062	IC-OP AMP
<b>MICOM</b>	IC901	AA13-30013H	SDA30C264	IC-MCU
	IC902	1102-001010	27C040	IC-EPROM
	IC903	1203-000515	7042	IC-VOL. DETECTOR
	ICT01	1204-001579	SDA5275-3P	IC-OSD PRPROCESSOR
	ICT02	1105-001315	4E170411	IC-DRAM

### 3. Specifications

<b>Model</b>		CS29A7HF9X CS34A7HF9X
<b>Dimensions (mm)</b>	<b>Set</b>	862 (W) x 515 (D) x 585 (H)
	<b>Transmitter</b>	54 (W) x 31.5 (D) x 220 (H)
<b>Weight</b>	<b>Set</b>	56.3 Kg
	<b>Transmitter</b>	153 g (including batteries)
<b>Picture Tube</b>		Hi Contrast Instant Reception Type
<b>Tuning Ranges</b>		VHF (CH 1 ~ 12)
		UHF (CH 21 ~ 69)
		CATV (CH S1 ~ S40)
<b>Television System</b>		PAL, SECAM, NTSC4.43, NTSC3.58, PAL60
<b>Antenna Input</b>		VHF, UHF: 75 ohm unbalanced type
<b>Intermediate Frequency</b>		Video: 38.9 MHz
		Sound: (B/G)334.4MHz, (I)32.9MHz, (D/K)32.4MHz
		Chrominance Subcarrier: 34.47 MHz
<b>Power Supply</b>	<b>Set</b>	AC 110V~230V, 50Hz, 60 Hz
	<b>Transmitter</b>	DC 1.5V (AAA Size) x 2
<b>Power Consumption</b>		170 W
<b>Sound Output</b>		15 W x 2
<b>Adjustment System</b>		Transmitter Adjustment: Infrared Rays Type
		UHF/VHF electronic tuner fine tuning: Electronic Type
		Electronic Function Adjustment

Specifications are subject to change.

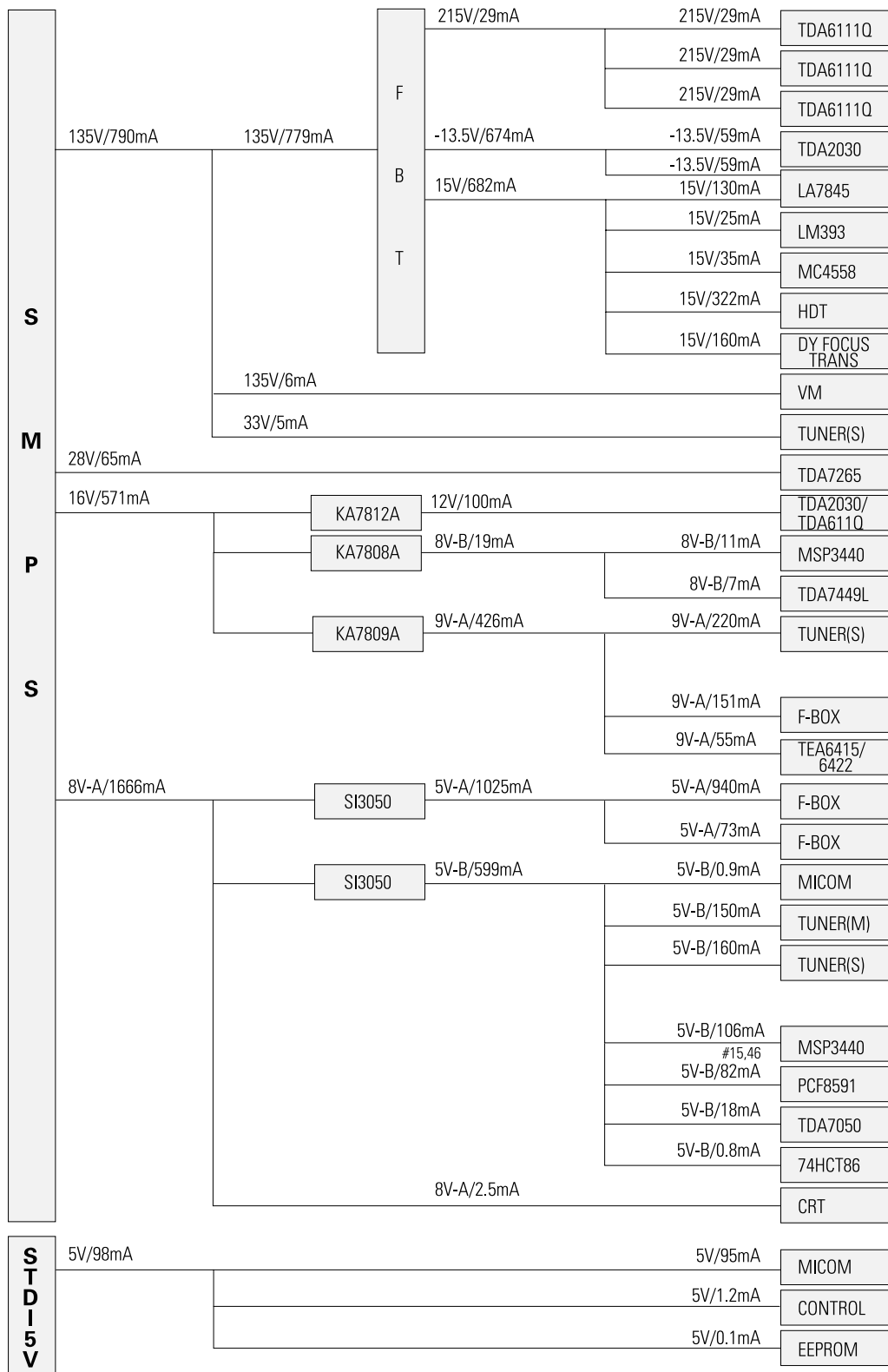
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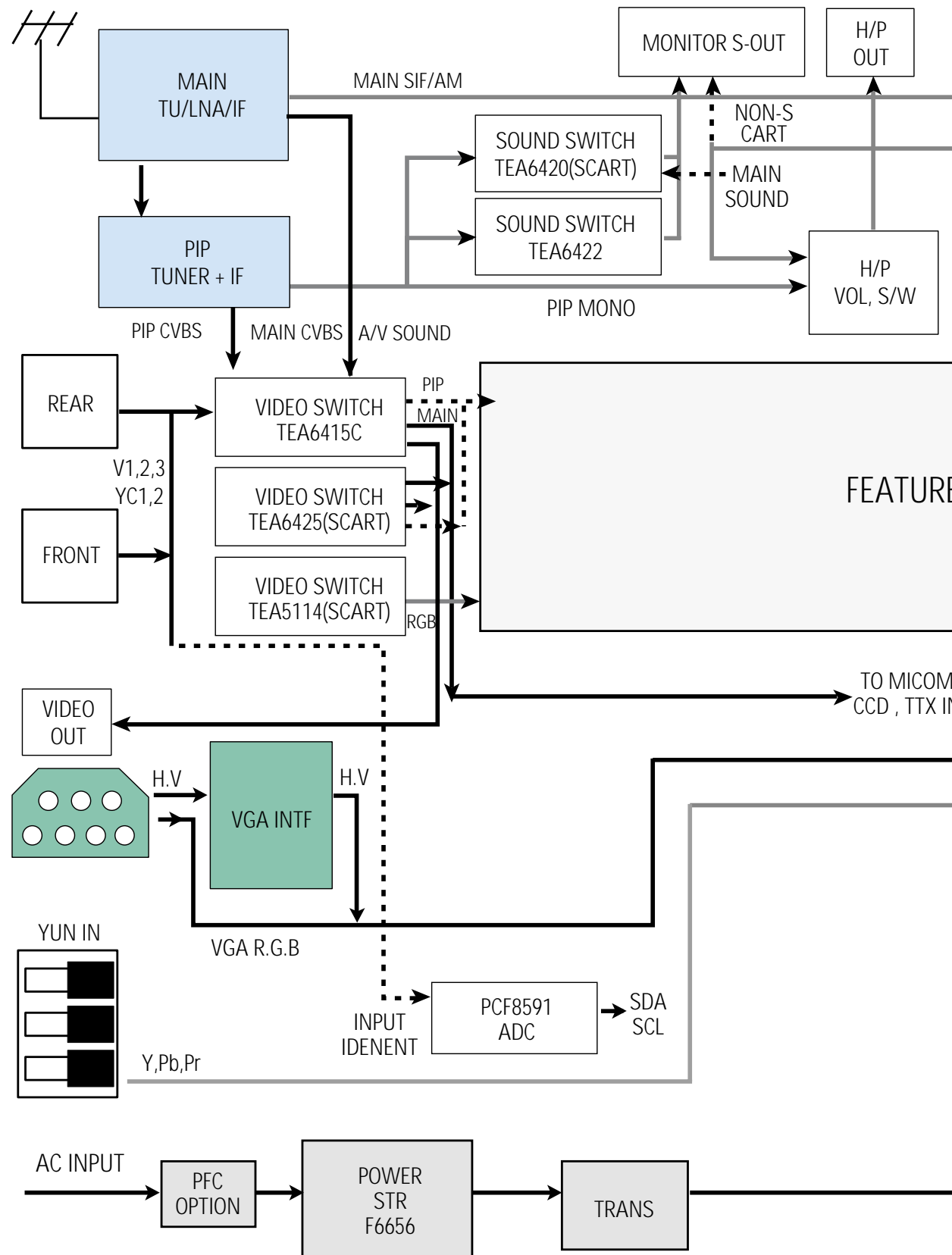
## 7. Block Diagrams

### 7-1 Voltage/Current Block



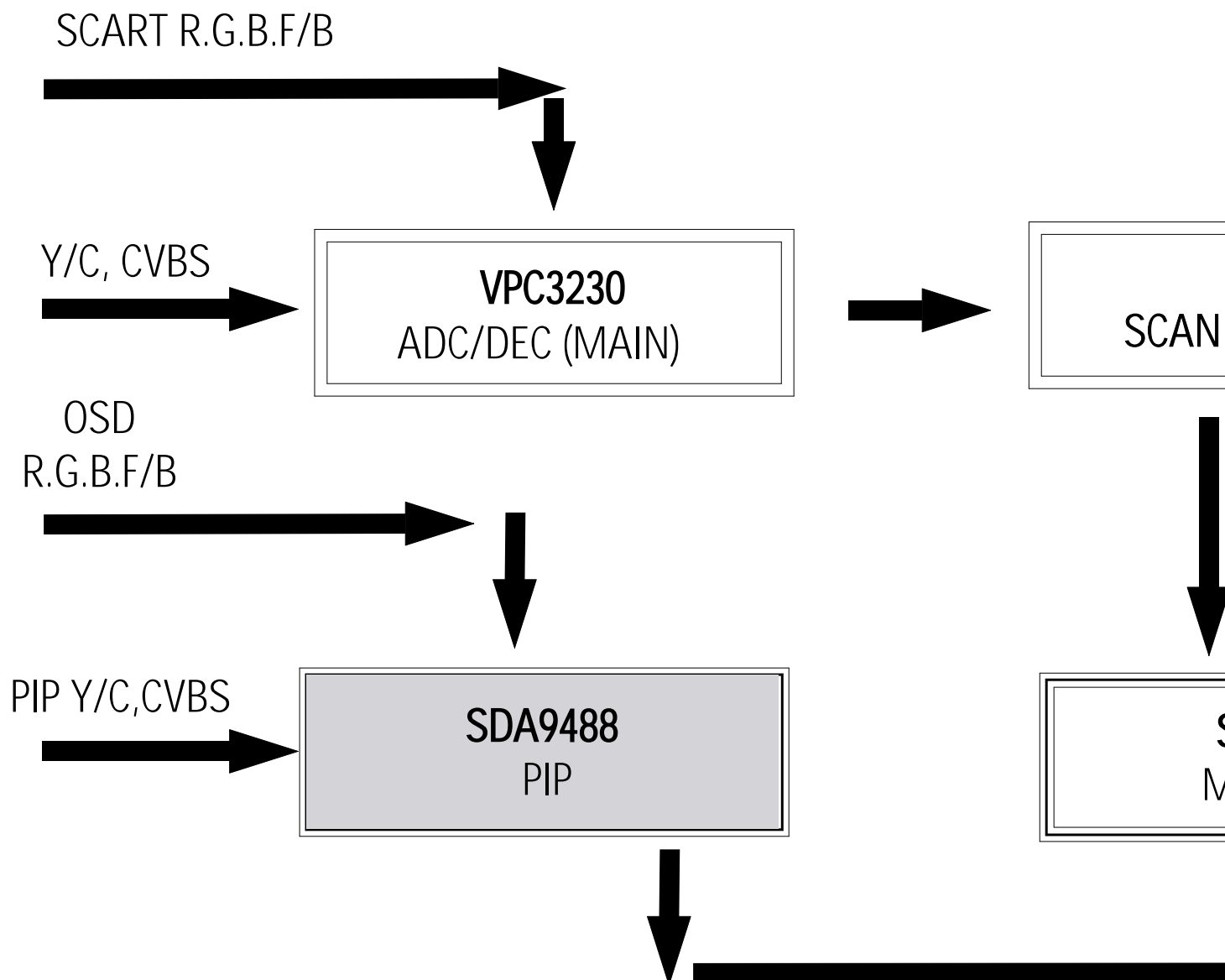


## 7-2 BLOCK

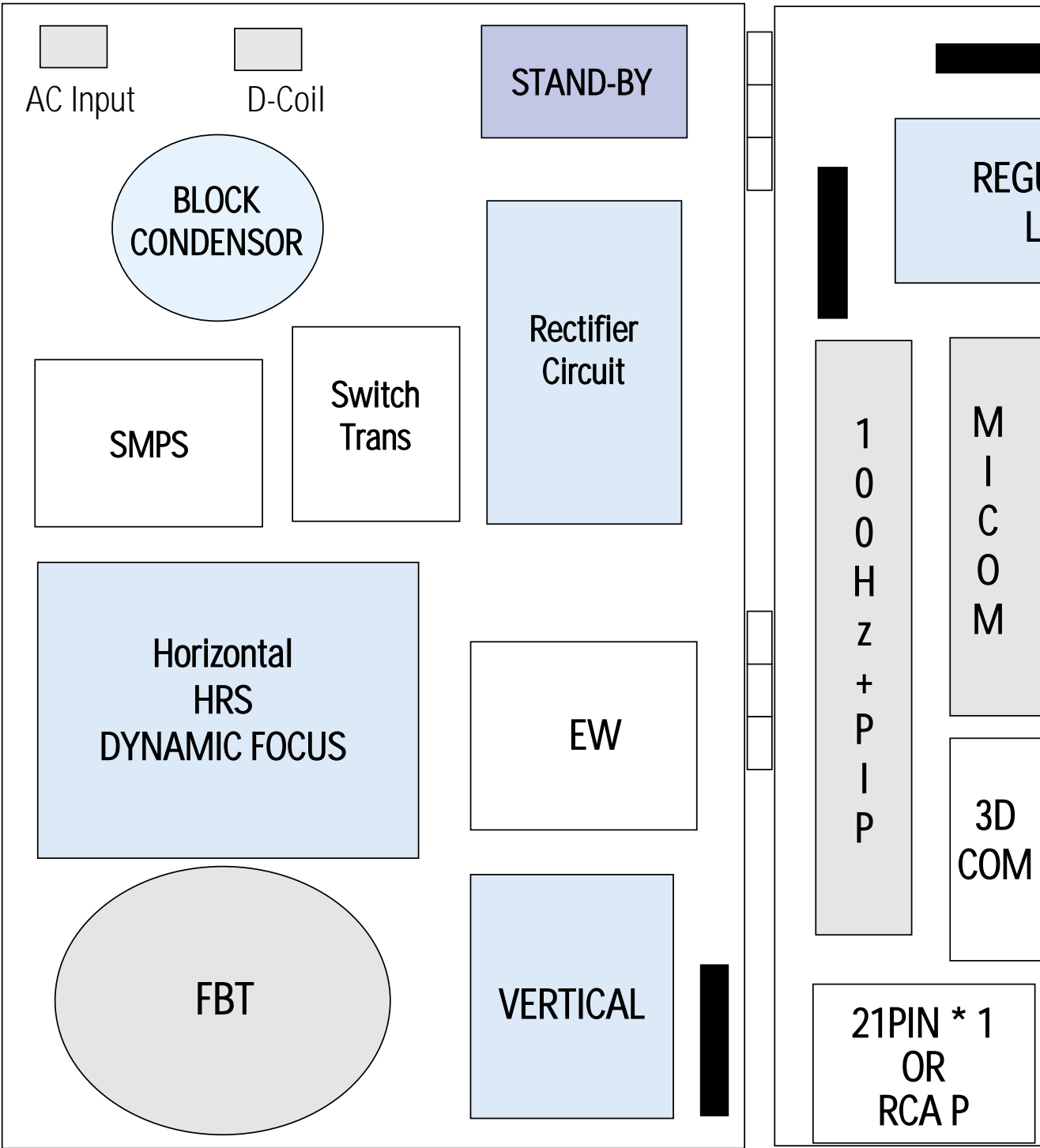


## 7-3 FEATURE BOX

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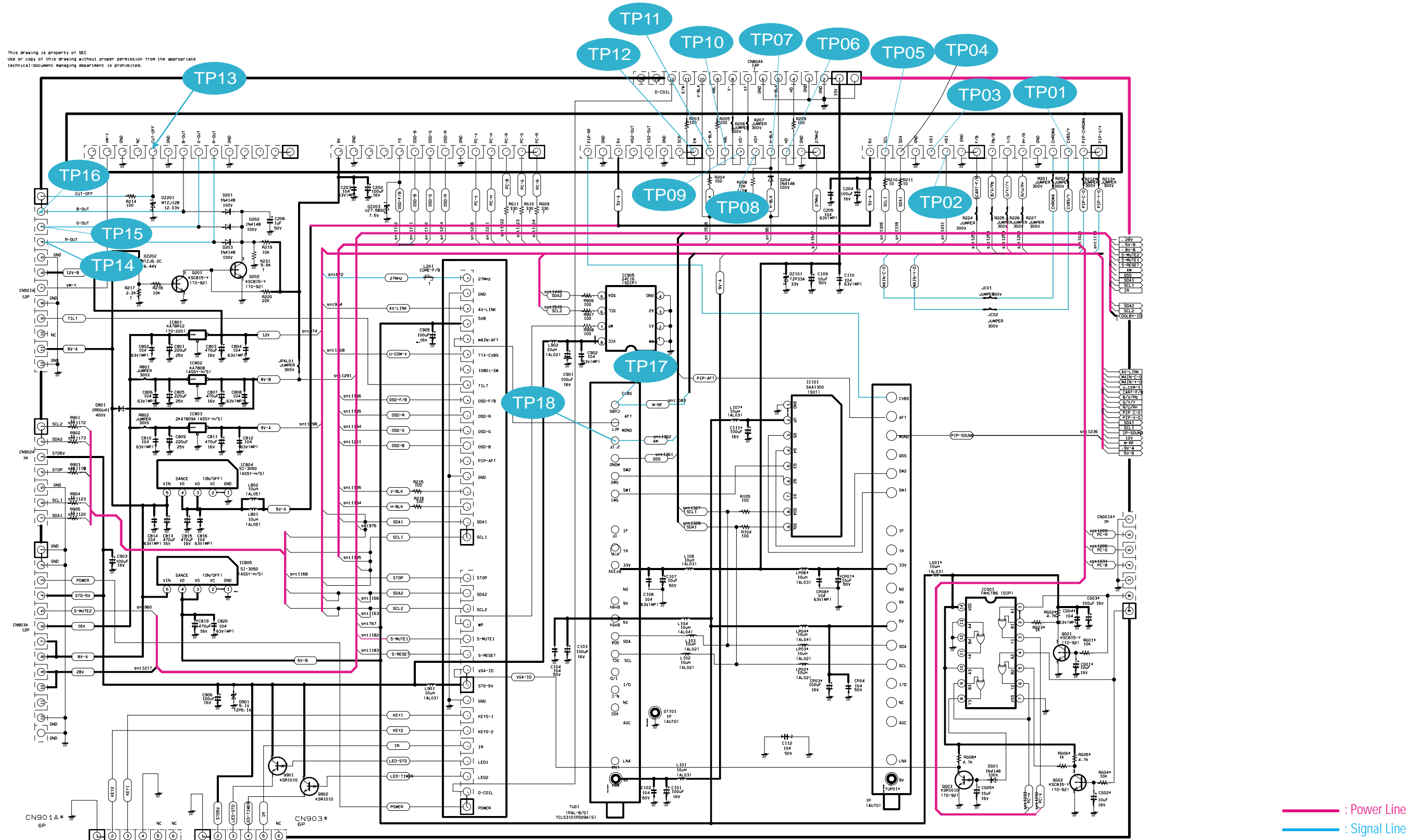


7-4 PCB LAYOUT

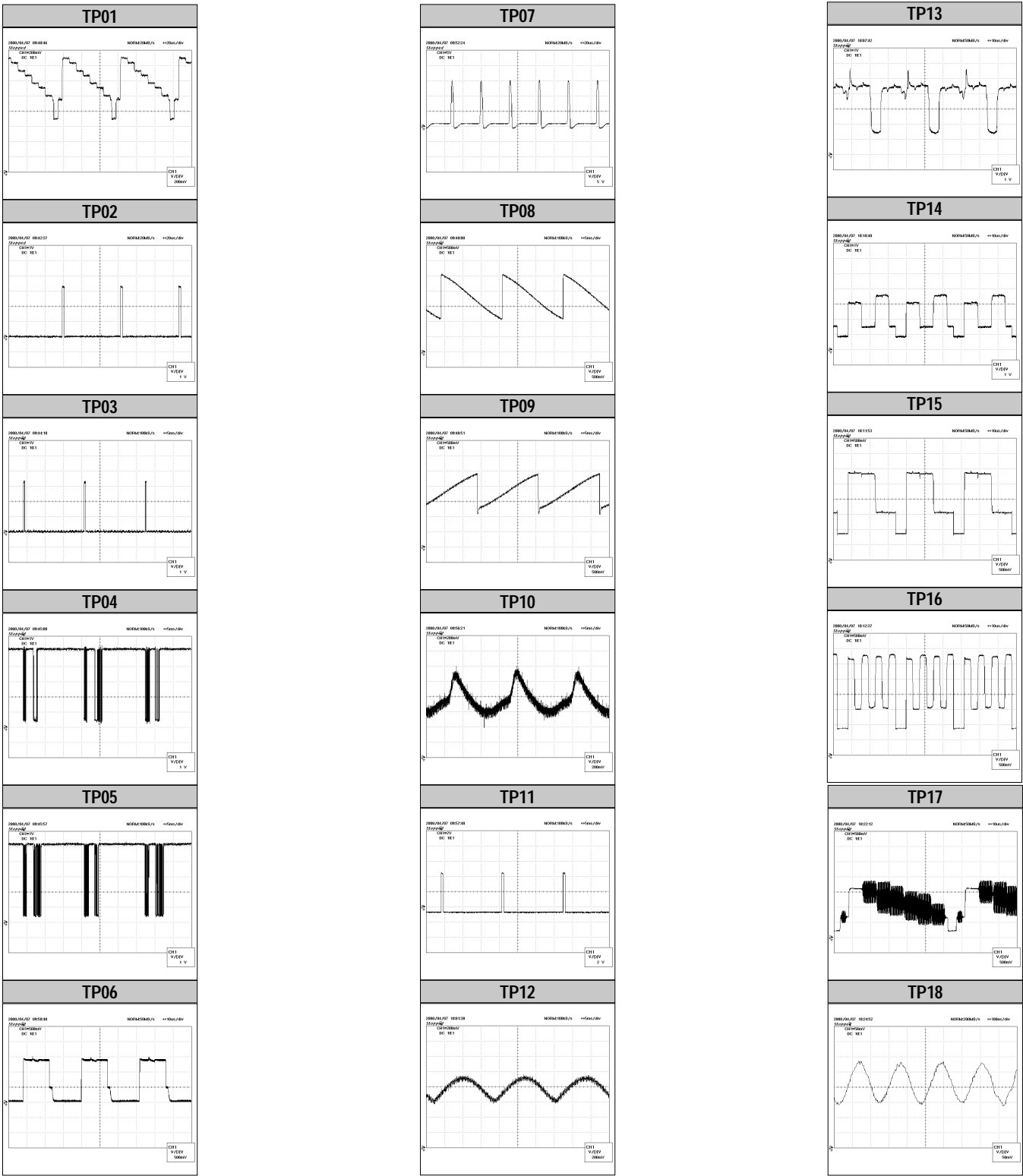


## 8. Schematic Diagrams

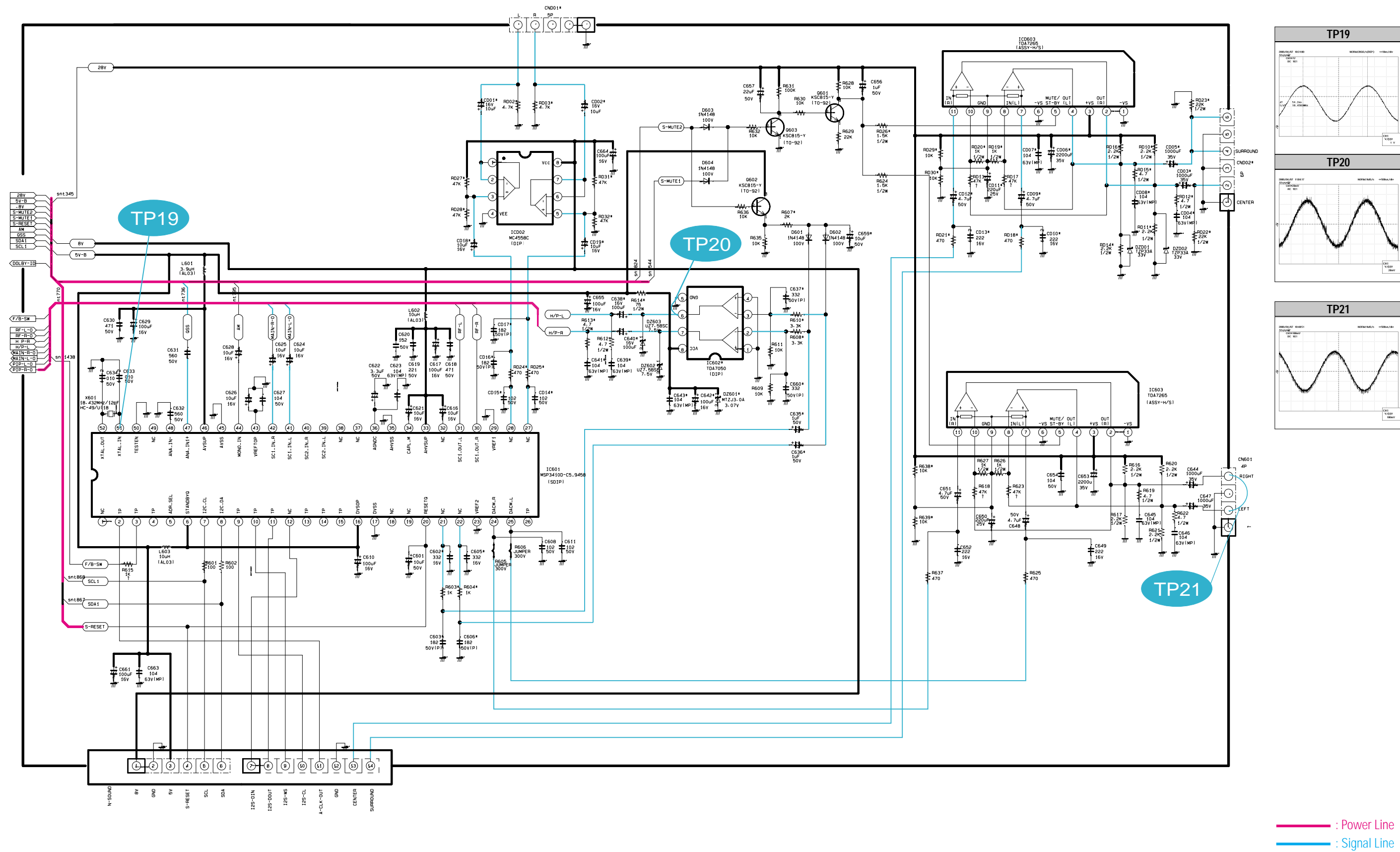
**8-1 MAIN 1/3 (RCA)**



8-1-1 MAIN 1/3 WAVEFORMS



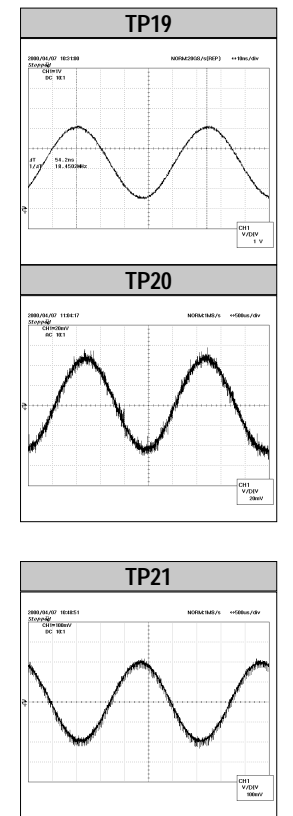
8-2 MAIN 2/3 (RCA)



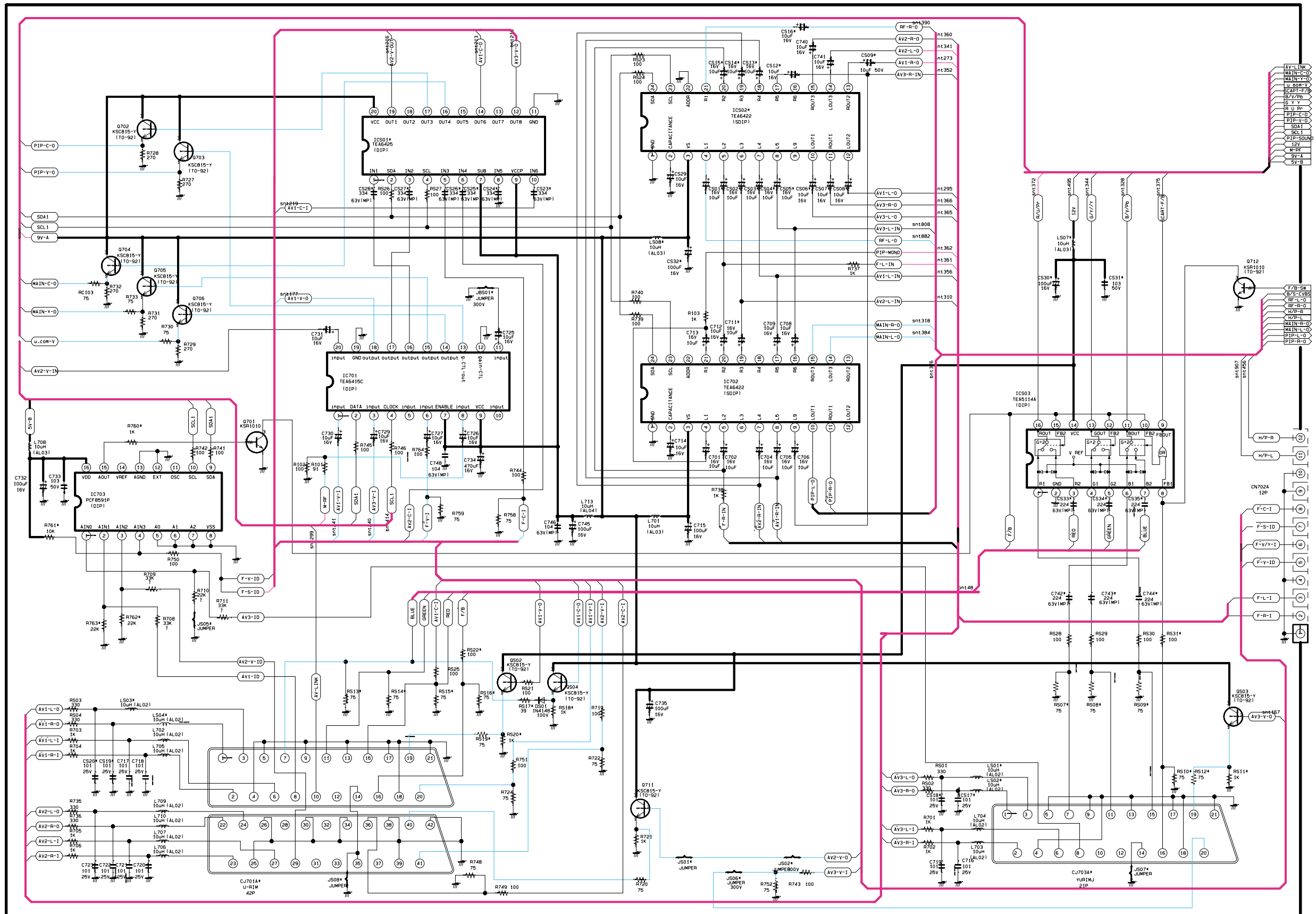








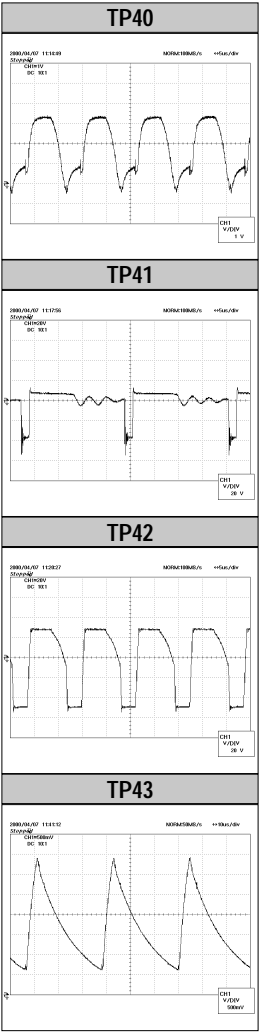
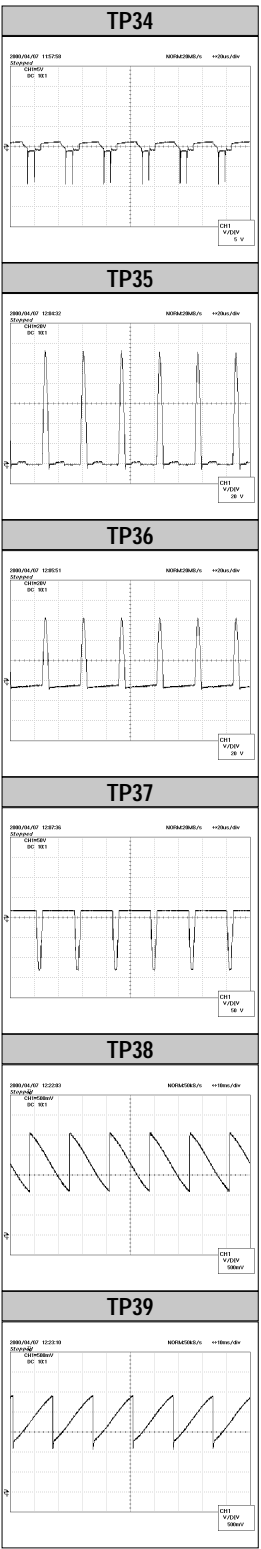
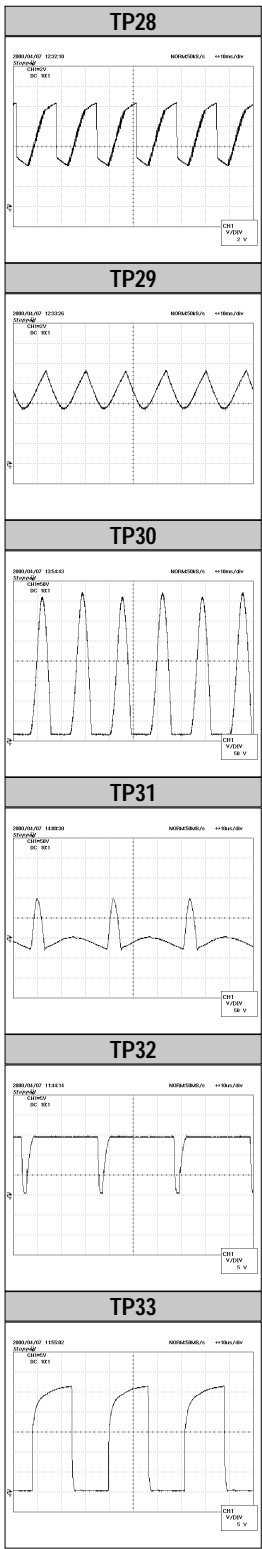
## 8-6 MAIN (3/3) SCART





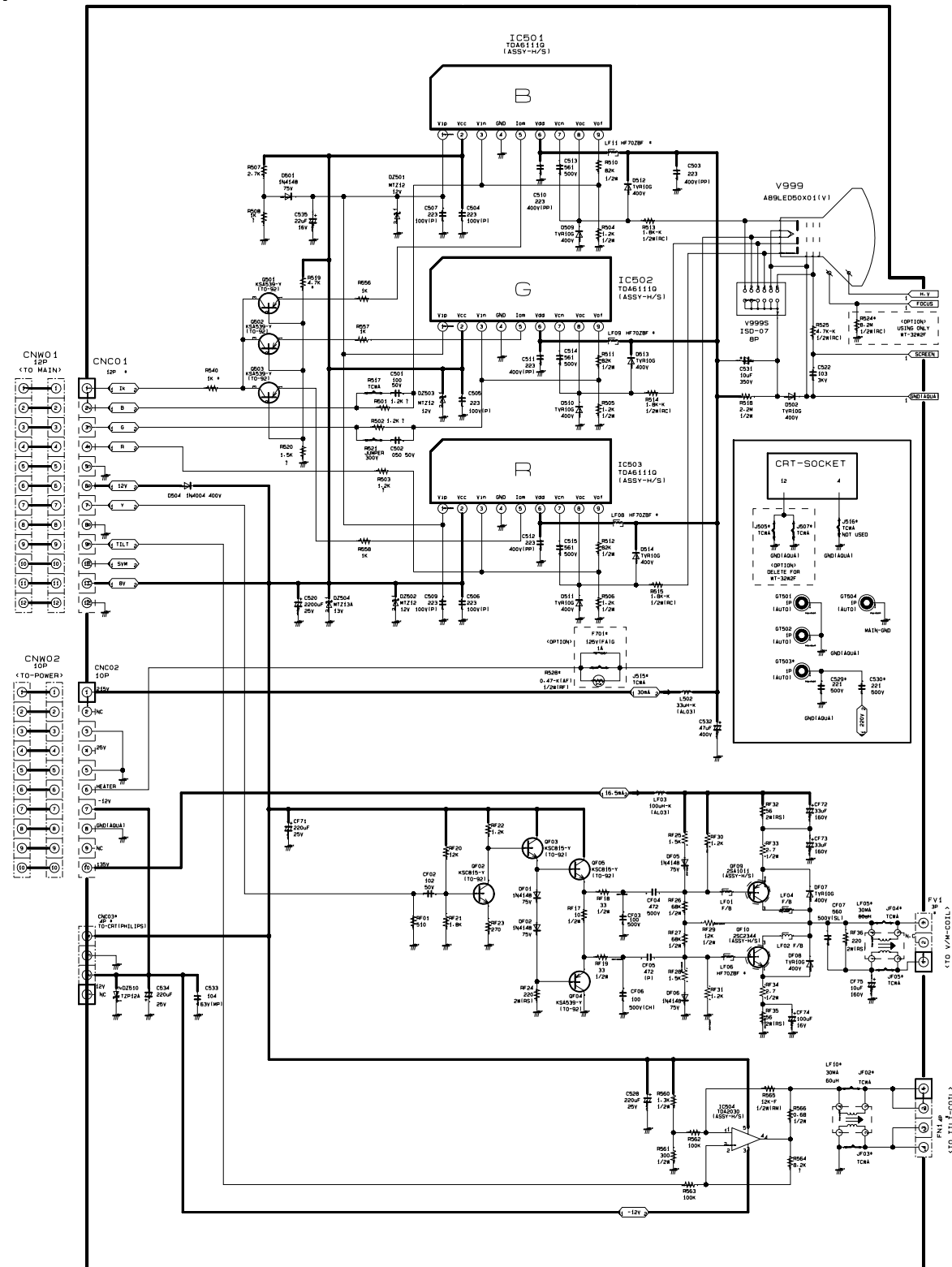


8-8-1 POWER WAVEFORMS

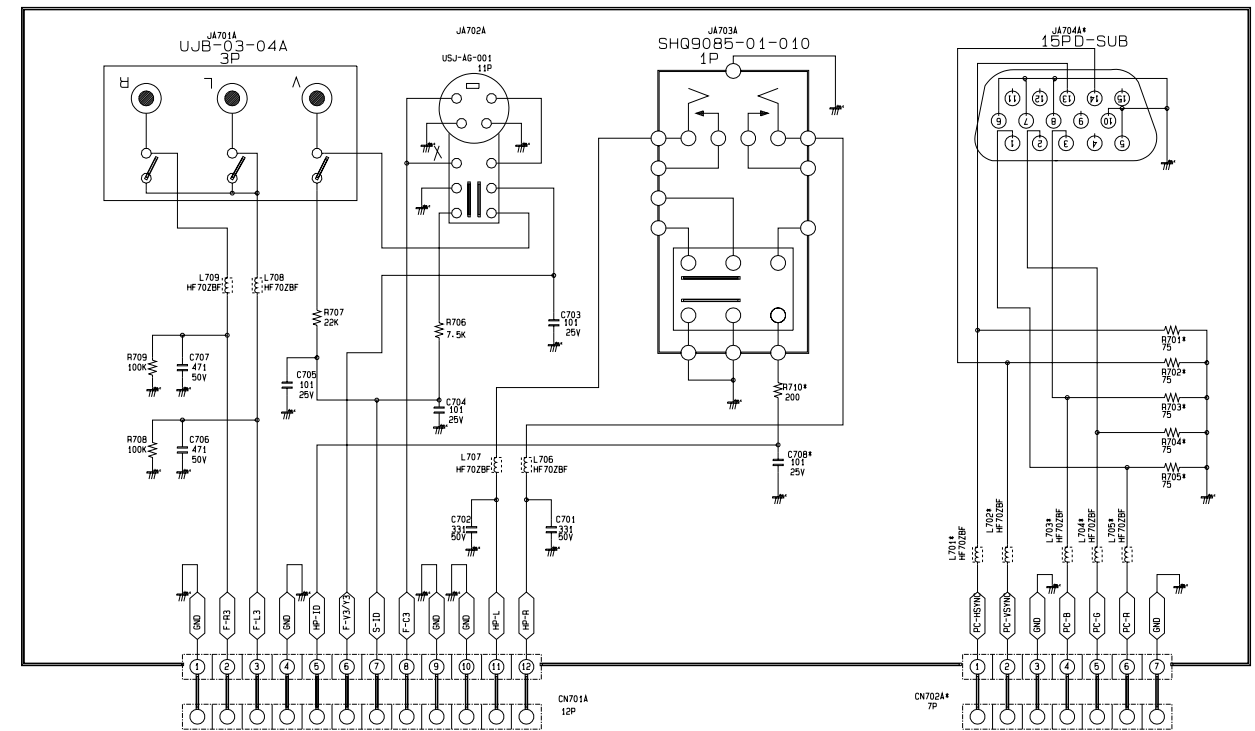


## 8-9 CRT, SIDE A/V

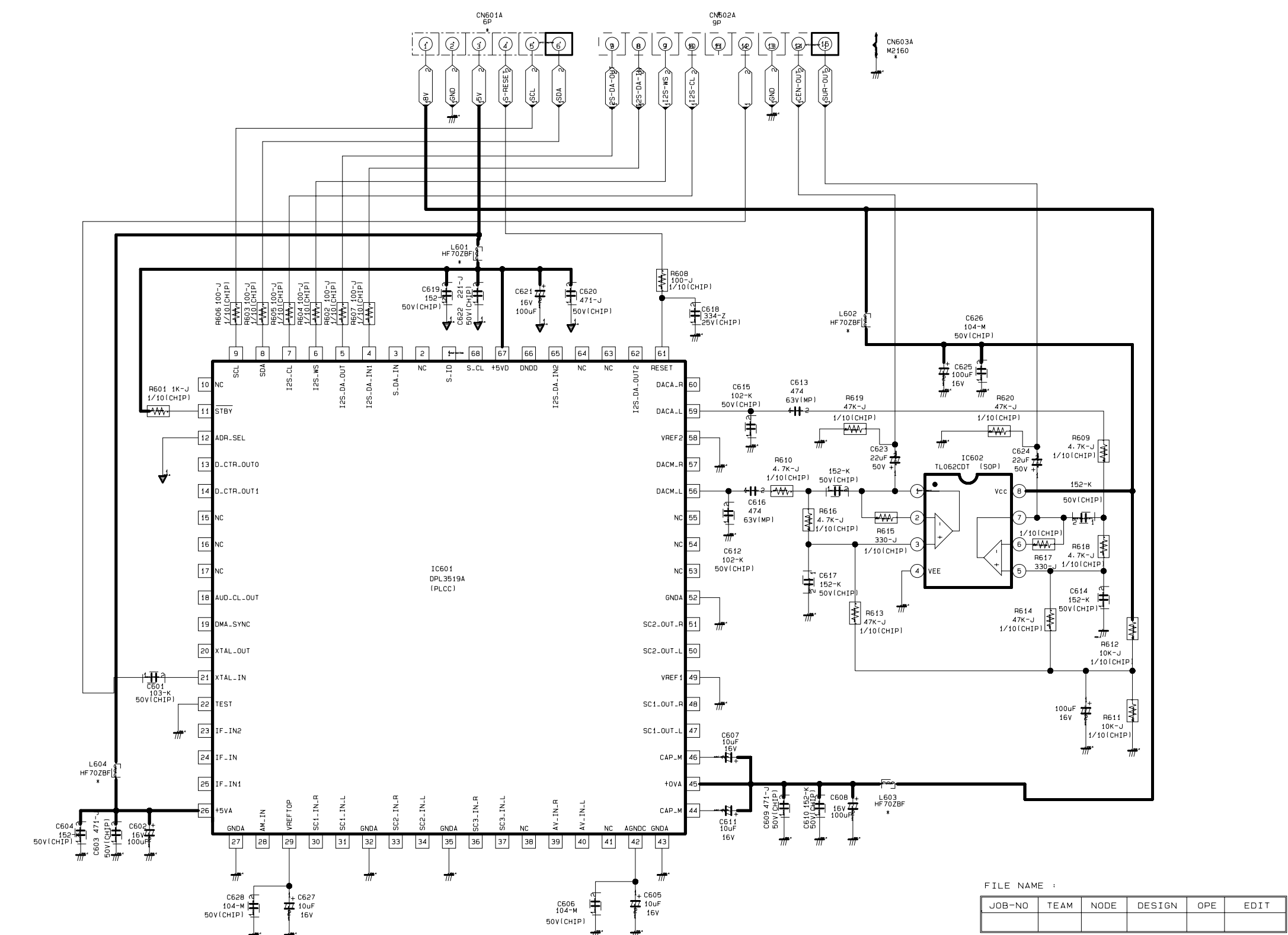
## CRT



## SIDE AV

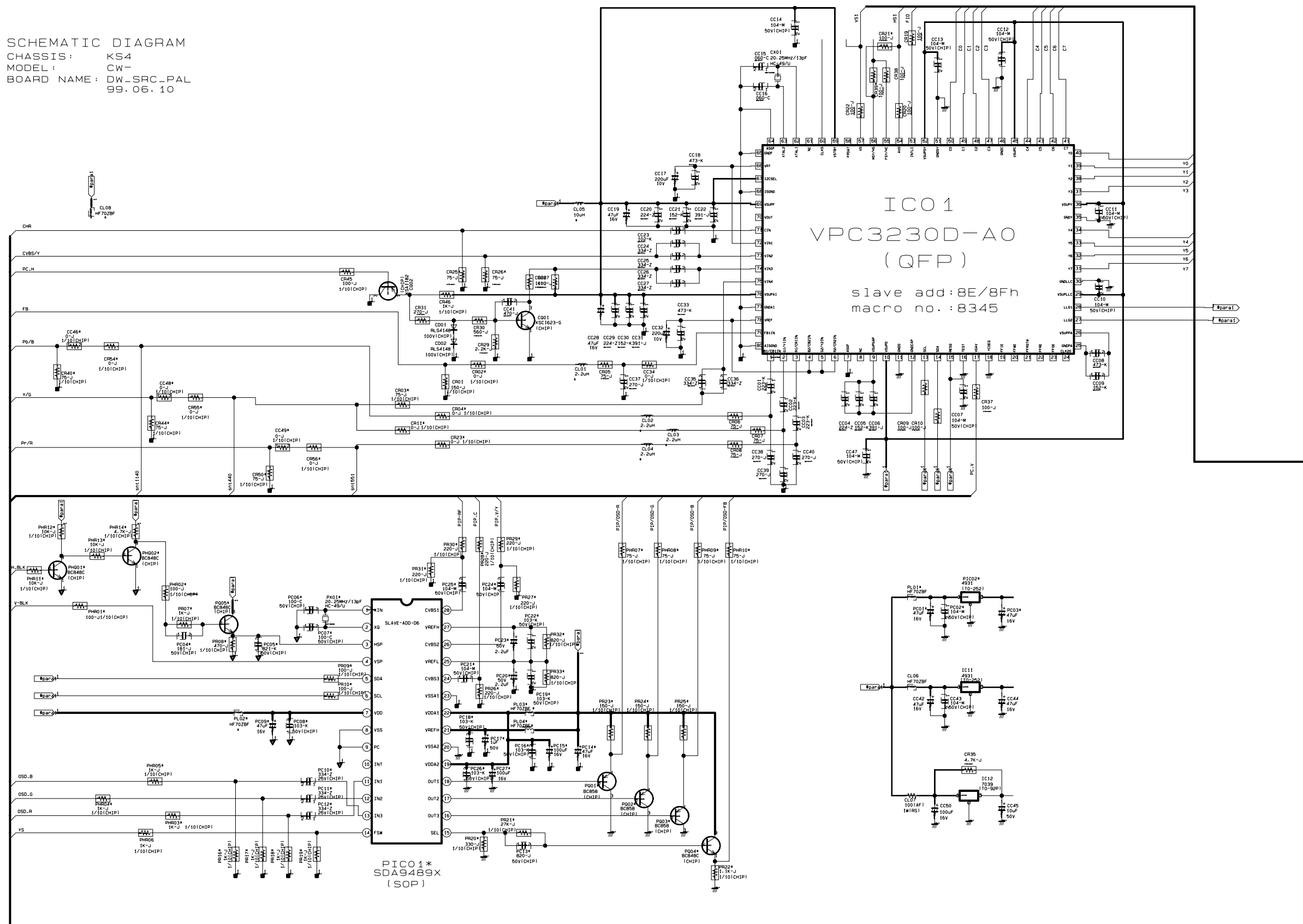


8-10 DOLBY



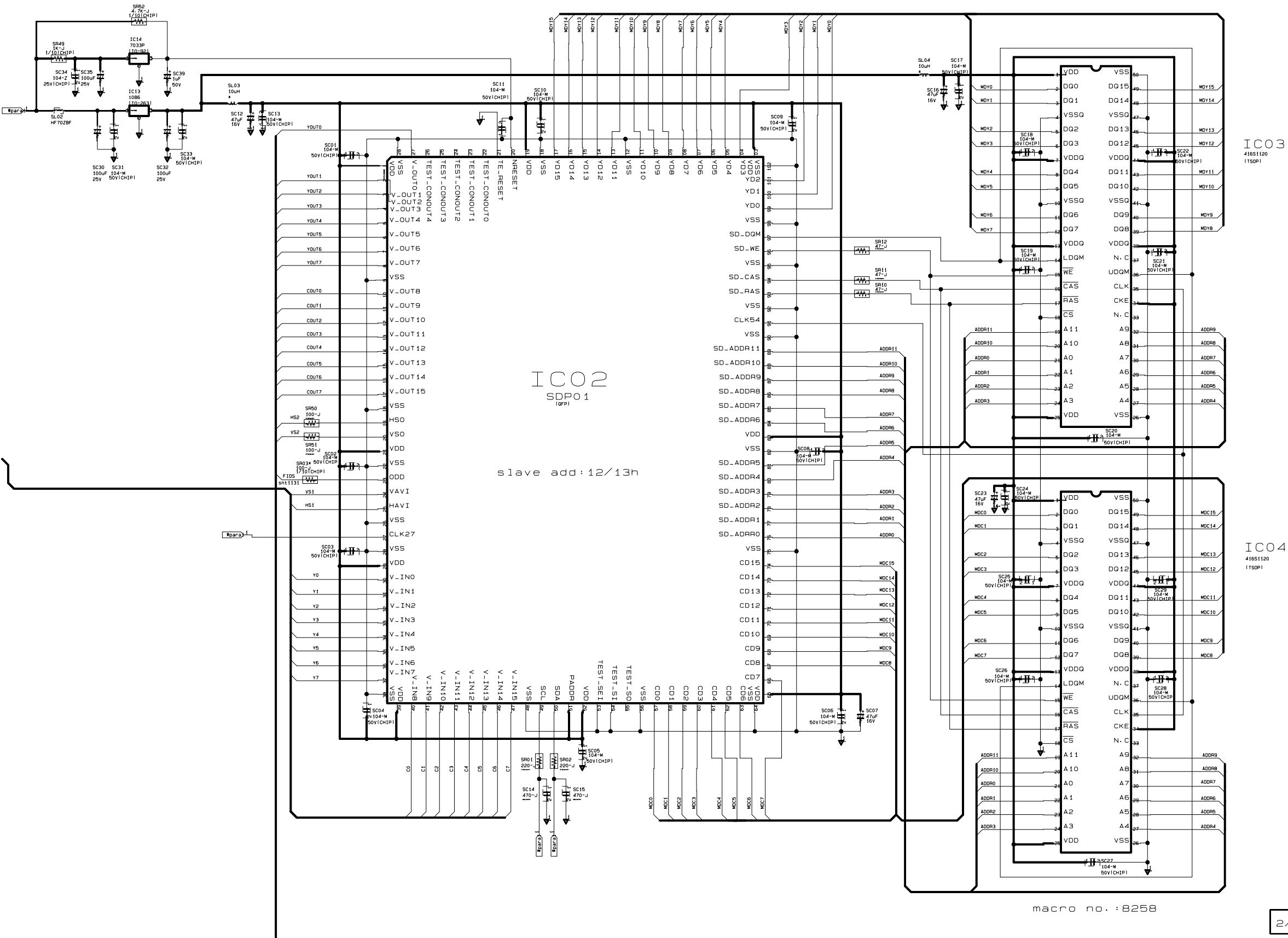
## 8-11 F-BOX (1/3)

SCHEMATIC DIAGRAM  
CHASSIS: KS4  
MODEL: CW-  
BOARD NAME: DW\_SRC\_PAL  
99.06.10

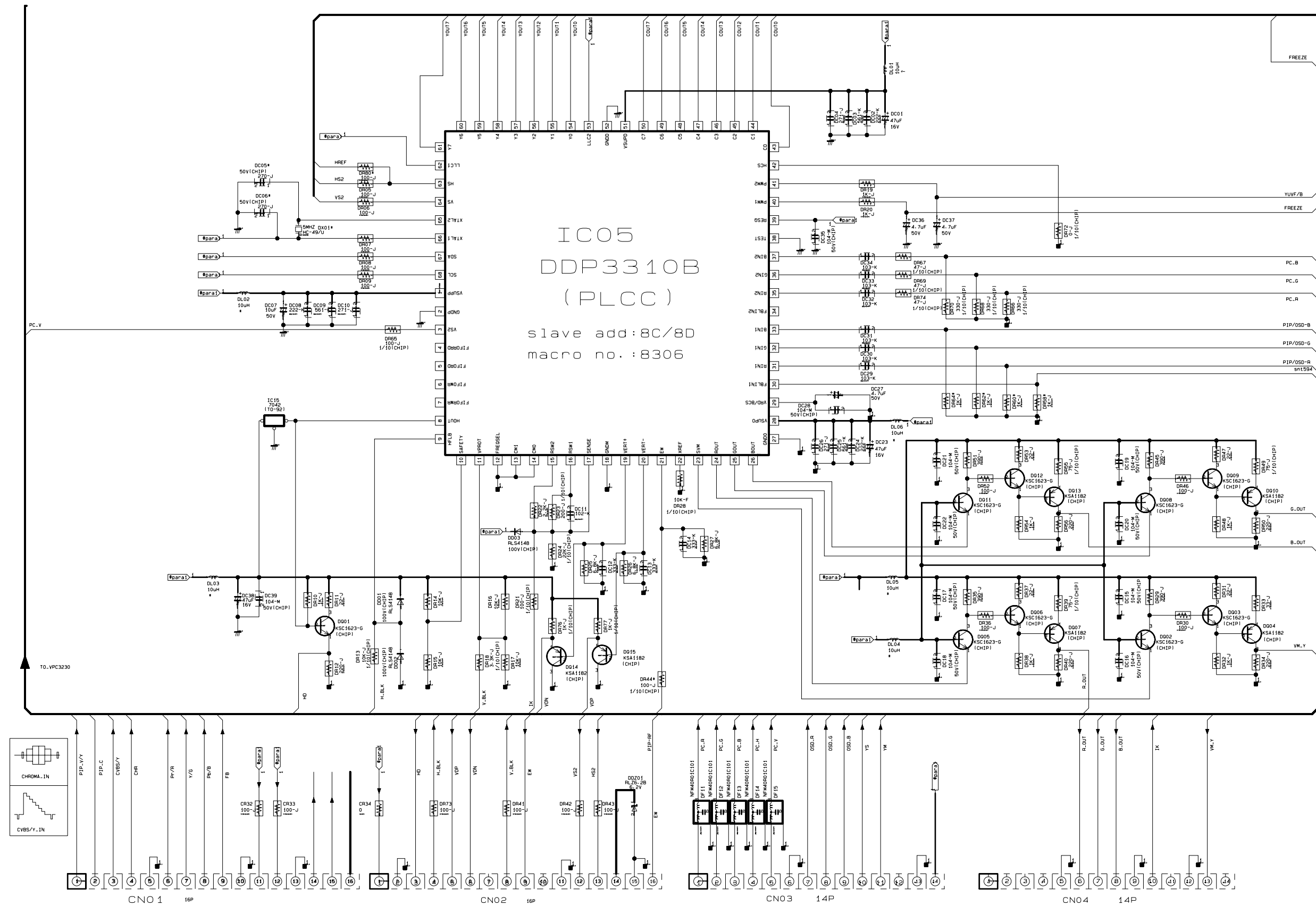




8-12 F-BOX(2/3)



8-13 F-BOX(3/3)



## 4. Alignment and Adjustments

### 4-1 Adjustments

#### 4-1-1 General Alignment Instructions

Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as vertical size, horizontal size, and focus. Observe the picture and check for good black and white details. There must be no objectionable color shading: If color shading is present, demagnetize the receiver. If color shading persists, re-do purity and convergence adjustments.

**Note :**

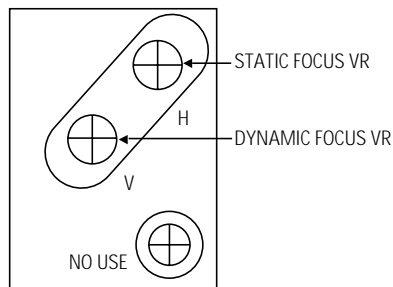
1. This '4. Alignment and Adjustments' applies to KS4A chassis applications.
2. AC Power Supply: 100~230 V
3. This service manual has been written on the basis of domestic remote-control model adopting KS4A chassis. Depending on sales location and product specifications, some of specifications herein may be changed.

#### 4-1-2 Focus Adjustment

KS4A contains a dynamic focus circuit. When CRT PCB, FBT or CRT is replaced, be sure to adjust in the following sequence:

##### Dynamic Focus Adjustment

1. Input a crosshatch pattern.
2. Select "Standard" from the menu.
3. Turn the Static Focus VR clockwise to set it to its maximum.
4. Turn the Dynamic Focus VR counterclockwise to set it to its maximum.
5. Turn the Static Focus VR counterclockwise slowly for the clearest center vertical line.



<FBT FOCUS PACK>



6. Turn the Dynamic Focus VR clockwise slowly for the clearest third line.



7. Check for the FOCUS of entire screen. If necessary, re-do adjustments 3~6.

### 4-1-3 Screen Voltage Adjustment

1. Use a DC multi-meter to identify RK, GK, BK. And then adjust FBT Screen VR so that the highest voltage becomes 175 Vp-p.

### 4-1-4 White Balance Adjustment

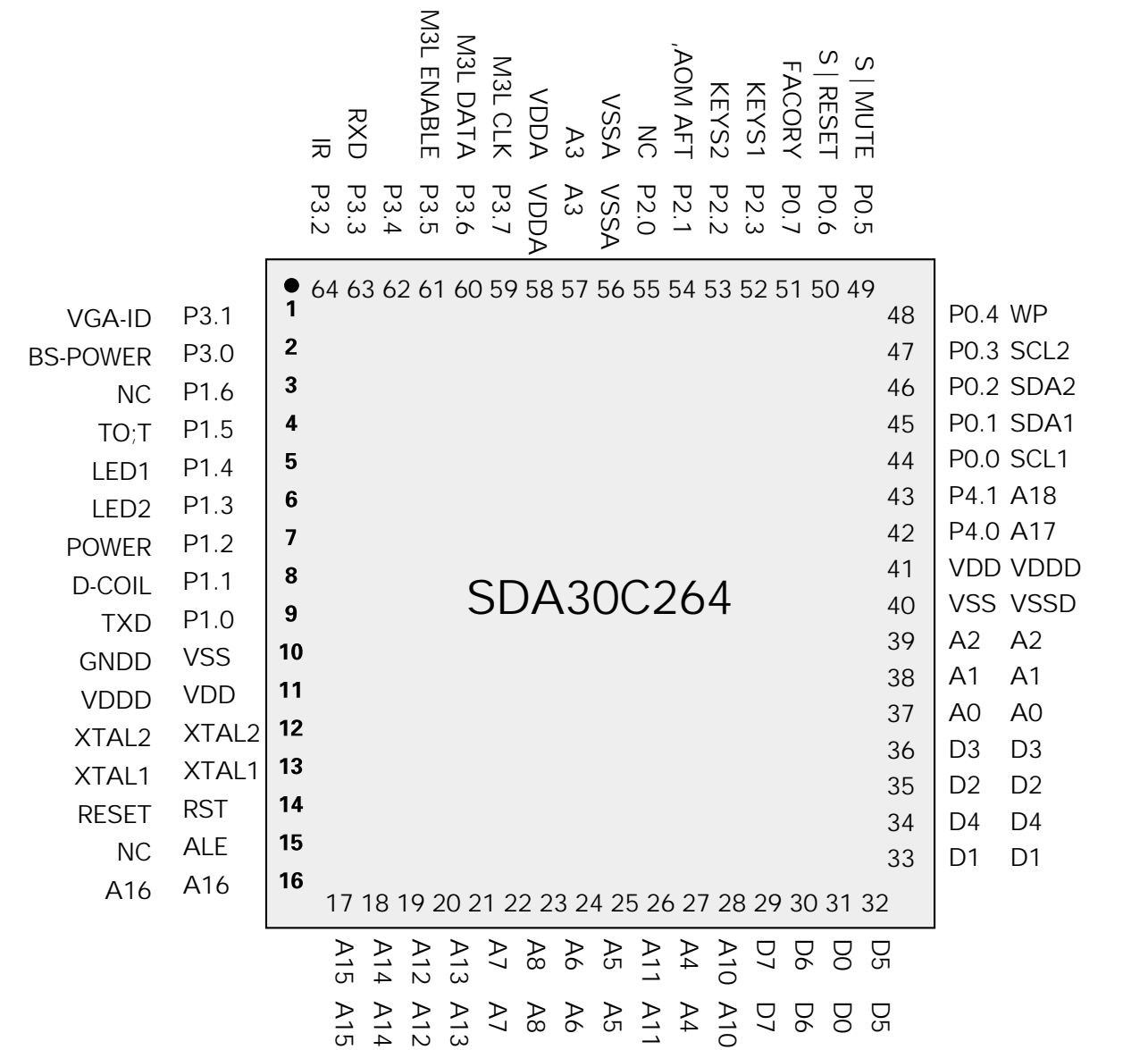
1. Select "Standard" from the menu.
2. Input an 100% White pattern.
3. In standby, press the remote-control keys in the following sequence:  
Display → Menu, Mute, Power on the TV set.
4. Warm up the TV set at least for 30 minutes.
5. Input a stair signal.
6. Use the Volume +/- buttons on the remote-control to select R Drive, G Drive, B Drive, Sub Cont.
7. Adjust Low-Light while viewing the darker side of screen.
8. Use the Volume +/- buttons on the remote-control to select Rcutoff, Gcutoff, Bcutoff, Sub Brt.
9. Adjust High-Light while viewing the brighter side of screen.
10. If not proper, re-adjust White Balance.
11. Press the Memory button to exit.

### 4-1-5 Sub-Brightness Adjustment

1. In standby, press the remote-control keys in the following sequence:  
Display → Menu → Mute → Power on the TV set.
2. Use the Channel Up/Down buttons to receive the sub bright adjustment signal.
3. Use the Volume +/- buttons to select SBT.
4. Press the Menu or Mute button on the remote control to adjust so that the seventh step on the right of screen cannot be seen.
5. Press the Memory button to exit.

4-2 MICOM PINNING

4-2-1 MICOM PINNING (SDA30C264)



## 4-2-1 MICOM FACTORY MODE OPTION BYTE

Ite	OSD	CIS	Asia/MiddleEast	Remark
m	CRT	4:3	4:3	-CPT Option(Wide/4:3):P.Size format, WSS Related Option
0	Language	Europe	Asia	-User Optional Language Group Setting(Europe/Asia)
1	Group			-Refer to "Language Group Table"
2	Lgnguage	Russia	By Destination	-Select the language of destination from Language Group * Note: Countermeasute to prevent IRAN from smuggling Once Arabic(Persian)has been selected,the user can't select Persian(Arabic)
3	ATM	ON	OFF	-ON: ATM, OFF: Auto search
4	Scart/Rca	Scart	Rca	-SCART: AV-Link,AV Setup Menu, Scart jack switching -RCA: RCA Jack switching, DVD
5	VGA	ON	ON	-Presence of VGA(ON/OFF)
6	Plug&Play	ON	ON	Application of Dolby Prologic(ON/OFF)
7	Dolby prg	ON	ON	-Application of Plug & Play (ON/OFF)
8	Pinp	CS	ON	-Application of Pinp(ON/OFF)
9	Cw/Cs	ON	CS	-CW/CS Tuner switching option
10	Lna	ON	ON	-Application of LNA(Pinp model) (ON/OFF)
11	Child Lock	ON	ON	-Application of Child Lock (ON/OFF)
12	HP jack ident	ON	ON	-ON:The main sound is cut off after identigying the headphome jack -OFF:The headphome jack ident PIN of MICOM is used as an IIC STOP PIN. The main sound is not cut off
13	Top ttx	OFF	OFF	-Set only the countries requesting TOP patent so that TOP TTX can be available(Countries using TOP:Germany,Austria,Italy,Swiss)
14	High Deviation	ON	ON	-Solve the Sound Stop problem by tutning High Deviation On for the countries with SOUND over modulation
15	TTX group	Russia	By Destination	-Grouping the TTX Language by Region:Refer to a separate TABLE
16	Carrier mute	OFF	OFF	-For Italy Only (Option)

## 4-2-2 MICOM MODULE PIN ALIGNMENT

PIN NO	PAL MODULE	PIN NO	PAL MODULE
1	29MHz	19	SCL2
2	GND	20	IIC STOP
3	AV-LINK	21	SDA1
4	5VB	22	SCL1
5	MAIN AFT	23	WP
6	CVBS	24	S-MUTE
7		25	S-RESET
8	TILT	26	VGA-ID
9	OSD/TTX-F/B	27	STD 5V
10	OSD/TTX-R	28	GND
11	OSD/TTX-G	29	KEYS1
12	OSD/TTX-B	30	KEYS2
13		31	IR
14	GND	32	LED1
15	VS2	33	LED2
16	HS2	34	D-COIL
17	GND	35	POWER
18	SDA2		

## 4-2-3 MICOM PORT ASSIGNMENT

NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	EXPLANATION
1	P3.1	VGA-ID	IN	LOW	VGA SIGNAL IDENT
2	P3.0		OUT	LOW	
3	P1.6	NC	-	-	-
4	P1.5(PWM)	TILT	OUT	PWM	TILT CONTROL
5	P1.4	LED1	OUT	-	ON/OFF LED CONTROL
6	P1.3	LED2	OUT	-	TIMER LED CONRTOL
7	P1.2	POWER	OUT	LOW	PICTURE ON PORT
8	P1.1	D-COIL	OUT	LOW	D-COIL CONTROL
9	P1.0	TXD	OUT	-	AV LINK CONTROL
10	VSS	GNDD	-	GND	DIGITAL GND
11	VDD	VDDD	IN	STD 5V	DIGITAL VCC
12	XTAL2	XTAL2	OUT	-	12MHz XTAL
13	XTAL1	XTAL1	IN	-	MICOM TESET PORT
14	RST	RESET	IN	LOW	NOT USED
15	ALE	NC			EPROM CONTROL ADDRESS
16	A16	A16	IN/OUT	-	EPROM CONTROL ADDRESS
17	A15	A15	IN/OUT	-	EPROM CONTROL ADDRESS
18	A14	A14	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
19	A12	A12	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
20	A13	A13	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
21	A7	A7	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
22	A8	A8	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
23	A6	A6	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
24	A9	A9	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
25	A5	A5	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
26	A11	A11	IN/OUT	-	EPROM CONTROL DATA/ADDRESS



NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	EXPLANATION
27	A4	A4	IN/OUT	-	EPROM CONTROL DATA/ADDRESS
28	A10	A10	IN/OUT	-	"
29	D7	D7	IN/OUT	-	"
30	D6	D6	IN/OUT	-	"
31	D0	D0	IN/OUT	-	"
32	D5	D5	IN/OUT	-	"
33	D1	D1	IN/OUT	-	"
34	D4	D4	IN/OUT	-	"
35	D2	D2	IN/OUT	-	"
36	D3	D3	IN/OUT	-	"
37	A0	A0	IN/OUT	-	EPROM CONTROL ADDRESS
38	A1	A1	IN/OUT	-	EPROM CONTROL ADDRESS
39	A2	A2	IN/OUT	-	EPROM CONTROL ADDRESS
40	VSS	VSSD	-	GND	DIGITAL GND
41	VDD	VDDD	IN	STD 5V	DIGITAL VCC
42	A17/P4.0	A17	IN/OUT	-	EPROM CONTROL ADDRESS
43	A18/P4.1	A18	IN/OUT	-	EPROM CONTROL ADDRESS
44	P0.0	SCL1	IN/OUT	-	EPROM CONTROL BUS
45	P0.1	SDA1	IN/OUT	-	EPROM CONTROL BUS
46	P0.2	SDA2	IN/OUT	-	SLAVE IC CONTROL BUS
47	P0.3	SCL2	IN/OUT	-	SLAVE IC CONTROL BUS
48	P0.4	WP	OUT	HIGH	EEPROM WRITE PROTECTION
49	P0.5	S-MUTE	OUT	HIGH	MAIN SOUND AMP MUTE
50	P0.6	S-RESET	OUT	LOW	MSP RESET
51	P0.7	FACTORY	IN	LOW	BIS ADJ.MODE SELECTION
52	P2.3(A/D)	KEY1	IN	-	CH.UP,CH.DOWN,VOL.UP,VOL.DOWN,MENU

NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	EXPLANATION
53	P2.2(A/D)	KEY2	IN	-	MUTE, TV/VIDEO
54	P2.1(A/D)	MAIN AFT	IN		
55	P2.0(A/D)	P2.0(A/D)			
56	VSSA	VSSA	-	GND	ANALOG GND
57	A3	A3	IN/OUT	-	EPROM CONTROL ADDRESS
58	VDDA	VDDA	IN	STD 5V	ANALOG VCC
59	P3.7	M3L CLK	IN/OUT	-	SDA5275 MEGATEXT IC CONTROL BUS
60	P3.6	M3L DATA	IN/OUT	-	"
61	P3.5	M3L ENABLE	OUT	-	"
62	P3.4		IN	HIGH	
63	P3.3	RXD	IN		AV LINK
64	P3.2	IR	IN	-	REMOTE CONTROL SIGNAL INPUT

## 4-3 FACTORY MODE CONTROL

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### 4-3-1 Factroy Mode Data Control

#### 1. Enter & Concel the Factory Mode

##### 1) Usual Remote Control

Enter : PICTURE OFF -> DISPLAY KEY -> MENU KEY -> MUTE KEY

(Press each remote control key with in 3 seconds)

Cannel : POWER OFF -> ON

##### 2) Factory Remote Control

Enter : DISPLAY KEY -> FACTORY KEY

(Press each remote control key with in 3 seconds)

Cannel : POWER OFF -> ON

Press the FACTORY key twice at intervals of at lease 1 second.

(Enter the AGING Mode once)

#### 3) Set Value When Entering the Factory Mode

- Picture Mode & Sound Mode are set to the standard data

#### 4) Adjustments

- CH. UP/DOWN Key : Use to select the item you want

- VOLUME UP/DOWN Key : Increases or decreases the value of data.

- MENU Key : Use to save the current set value in EEPROM and exit to the upper mode.

- Use the DIGIT Key to switch channels

- Use the TV/VIDEO Key th conver to the AV Mode

## 4-4 FACTORY MODE MENU

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Service Mode  
Video Adjustment  
Y.C-Delay  
Deflection normal  
Deflection VGA  
Option byte  
Reset

### Video Adjustment

00 PKRD	03	12 Sub Tint	04	24 Ymax	123
01 BRCT	00	13 V Peaking	07	25 TB_REL	204
02 R Drive	< 200 >	14 Svm Gain	32	26 BCL_TCUP	02
03 B Drive	200	15 Svm Delay	05		
04 G Drive	200	16 Svm Limit	85		
05 Sub Curoff	06	17 Ttx Cont	120		
06 Ibrm	180	18 Ttx brt	15		
07 R Cutoff	80	19 Pip Cont	00		
08 B Cutoff	80	20 Bcl Thrs	41		
09 G Cutoff	80	21 Bcl Tc	153		
10 Sub Brt.	10	22 Bcl Gain	15/25		
11 Sub Color	08	23 Bcl Mc	145		

Item	OS D	Range	29A7	REMARK
00	PKRD	0-7	3	DDP3310 R,1AEhex BIT(7:5) -USER PEAKING CONRTOL REDUCTION (The bigger the value is the larger the amount of REDUCTION)
01	BRCT	0-1	0	VPC3230 FP BLOCK R,52hex (BIT(7:0)), R,53hex(BIT(5:0)) Reproduce the levels under BLACK LEVEL (When the level=1,the levels under BLACK LEVEL are reproduced)
02	R DRIVE	0-255(X2)	200	WHITE DRIVE CONTROL - After all the SCREEN adjustments are complete, fix the value of G DRIVE and adjust HIGH LIGHT WHITE BALANCE.
03	B DRIVE	0-255(X2)	200	
04	G DRIVE	0-255(X2)	200	
05	Sub Cont	0-12	6	DDP3310 R,1B1hex Bit <5:0> (Use 12 steps out of 63 steps to add the value of sub cont to the contrast control of picture control)
06	Lbrm	0-255	180	DDP3310 R,168hex (Internal brightness for measurement) - Fixed Value by CRT
07	R Cutoff	0-255	80	CUTOFF DRIVE CONRTOL - After all the SCREEN adjustments are complete, fix the value of G DRIVE and adjust LOW LIGHT WHITE BALANCE.
08	B Cutoff	0-255	80	
09	G Cutoff	0-255	80	
10	Sub Brt.	0-20(X8)	6	DDP3310 R,167hex Bit<15:6>(Add the value of Sub Brightness to Brightness Control of Picture Control)
11	Sub Color	0-12	8	DDP3310 R,1B2hex Bit<15:9>(Use 12 steps out of 63 steps to add the value of sub color to the color control of picture control)
12	Sub Tint	0-12	4	VPC3230 FP Sub R,DC hex - NTSC only
13	V Peaking	0-12	7	VPC3230 FP Sub R,28hex Bit<11:8>(Vertical peaking control)
14	Svm Gain	0-63	32	DDP3310 R,1A7hex Bit<5:0>(VM gain control)
15	Svm Delay	0-15	5	DDP3310 R,19Bhex Bit<3:0>(VM gain control)
16	Svm Limit	0-255	85	DDP3310 R,19FBhex Bit<7:0>(VM limit value control)
17	Ttx Cont	0-255	120	Set TTX mode contrast level
18	Ttx brt	-128-127	15	DDP3310 EXT BRIGHTNESS
19	Pip Cont	0-15	0	SDA9489X R,11hex Bit<7:4>(PIP contrast adjustment)
20	Bcl Thrs	0-255(X8)	41	DD3310 R,160hex Bit <15:4>(ABL thresh hold setting) - Set ABL Operation Point (Cuve Point)

Item	OSD	Range	29A7	REMARK
21	Bcl Tc	0-255(X2)	153	DDP3310 R,161hex Bit<8:0>(ABL reduction time constant setting)
22	Bcl Gain	0-255(X2)	15/25	DDP3310 R,162hex Bit<14:6>(ABL curve setting) -Set the tilt between ABL Operation Point (Curve Point)and MAX BEAM
23	Bcl Mc	0-255(X2)	145	DDP3310 R,163hex Bit<14:6>(Minimum RGB gain limiter)
24	Ymax	0-255(X2)	123	Peak white drive limit
25	TB_REL	0-255(X2)	204	Peak white drive limit tilt point
26	BCL_TCUP	0-255	02	ABL Cancel Contrast Increase Time

Y.C-Delay		
00	Pal-B/G	00
01	Pal-D/K/L	-3
02	Pal-I	◁ -3 ▷
03	Secam-B/G	03
04	Secam-D/K,L	02
05	Ntsc	-1
06	Pal-av	01
07	Secam-av	03
08	Ntsc-av	01

Item	OSD	Range	29A7	REMARK
00	Pal-B/G	-3~3	00	VPC3230 FP Sub R, 23hex Bit<11:6> control(FIX) -Set EEPROM MAP by system separately -Video: Identified at VPC3230 -Sound: Identified at MSP3410
01	Pal-D/K/L		-3	
02	Pal-I		-3	
03	Secam-B/G		03	
04	Secam-D/K,L		02	
05	Ntsc		-1	VPC3230 FP Sub R, 23hex Bit<11:6> control(FIX) -Set EEPROM MAP by system separately -Video: Identified at VPC3230 -Sound: Not Identified
06	Pal-av		01	
07	Secam-av		03	
08	Ntsc-av		01	

# Deflection Normal

00	P. (N) V-SIZE	◁20▷	13	P. (N) HOR-EHT	-24
01	P. (N) V-SFT	06	14	P. (N) VER-EHT	-48/90
02	P. (N) V-LIN	00	15	P. (N) EHTVTRS	56
03	P. (N) S-CORR	45	16	P. (N) EHTV2	44
04	P. (N) EW-WTH	-71	17	P. (N) EHTH2	95
05	P. (N) EW-PBI	43/25	18	P. (N) CRNU6	00
06	P. (N) H-SFT	24	19	P. (N) CRNL6	05
07	P. (N) EW-TPZ	00	20	P. (N) POFS2	-103
08	P. (N) BOW	00	21	P. (N) HSYNC DLY	93
09	P. (N) ANGLE	00	22	P. (N) PHP	28
10	P. (N) EW-UPCR	-12	23	P. (N) PVP	32
11	P. (N) EW-LOCR	00	24	P. (N) PHS	00
12	EHT TIME	07	25	P. PVS	00

Item	OSD	Range	Initial Value	Remark
00	P.(N)V-Size	-128~127(X4)	20	DDP3310 R,14Dhex:VERTICAL SIZE ADJUSTMENT
01	P.(N)V-Sft	-128~127	06	DDP3310 R,14Fhex:VERTICAL SHIFT ADJUSTMENT
02	P.(N)V-Lin	-128~127(X4)	00	DDP3310 R,150hex:VERTICAL LINEARITY ADJUSTMENT
03	P.(N)S-Corr	-128~127(X4)	45	DDP3310 R,151Dhex:VERTICAL S-CORRECTIONADJUSTMENT
04	P.(N)EW-Wth	-128~127	-71(200)	DDP3310 R,157hex:HORI.SIZE ADJUSTMENT
05	P.(N)EW-Pbl	-128~127	43(-128)	DDP3310 R,159hex:HORI.PRABOLA ADJUSTMENT
06	P.(N)H-Sft	-128~127	24	DDP3310 R,144hex:HORI. SHIFT ADJUSTMENT
07	P.(N)EW-Tpz	-128~127	00	DDP3310 R,158hex:TRAPEZOID DISTORTION FACTOR ADJUSTMENT
08	P.(N)Bow	-128~127	00	DDP3310 R,14Bhex:BOW ADJUSTMENT
09	P.(N)Angle	-128~127	00	DDP3310 R,14Ahex:PARALLELGRAM DISTORTION FACTOR ADJUSTMENT
10	P.(N)EW-UpCr	-128~127	-12	DDP3310 R,15Ahex:UP CONER 1/3 ADJUSTMENT
11	P.(N)EW-LoCr	-128~127	00	DDP3310 R,15Bhex:LOW CONER 1/3 ADJUSTMENT
12	EHT Time	0~255(X2)	07	DDP3310 R,15Dhex EHT OPERATION TIME CONSTANT(FIX)
13	P.(N)Hor-EHT	-128~127(X4)	-24	EHT OPERATION AT OVER DDP3310 R,147hex EHTVTRS(FIX)
14	P.(N)Ver-EHT	-128~127(X4)	-48	EHT OPERATION AT OVER DDP3310 R,15Chex EHTVTRS(FIX)

Item	OSD	Range	Initial Value	Remark
15	P.(N)EHIVTRS	-128~127(X8)	56	USE THE STEEP CURVE POINT OF HIGH VOLTAGE TO SELECT BOTH EHT AND EHT2 OPERATIONS(FIX)
16	P.(N)EHTV2	-128~127(X4)	44	EHT OPERATION AT LOW BEAM (less than EHTVTRS)
17	P.(N)EHTH2	-128~127(X4)	95	
18	P.(N)CRNL6	-128~127	00	UP CONER 1/6 ADJUSTEMENT(FIX)
19	P.(N)CRNL6	-128~127	05	LOW CONER 1/6 ADJUSTEMENT(FIX)
20	P.(N)POFS2	-128~127	-103	DDP3310 EXT.RGB(PIP,VGA,TTX/OSD)CLAMPING ADJUSTMENT(FIX)
21	P.(N)HSYNC DLY	0~255	93	SDP01 HORI. SYNC DELAY ADJUSTMENT -EXT.RGB(PIP,VGA,TTX/OSD)CLAMPING ADJUSTMENT(FIX)
22	P.(N)PHP	0~255	28	PIP POSITION ADJUSTMENT
23	P.(N)PVP	0~255	32	
24	P.(N)PHS	0~15	00	PICTURE POSITION INSIDE PIP ADJUSTMENT(FIX)
25	P.(N)PVS	0~15	00	

#### Deflection VGA

00	V-SIZE	◁ 20 ▷	13	HOR-EHT	-24
01	V-SFT	06	14	VER-EHT	-48
02	V-LIN	00	15	EHTVTRS	255
03	S-CORR	45	16	EHTV2	00
04	EW-WTH	-71	17	EHTH2	00
05	EW-PBI	43	18	CRNU6	05
06	H-SFT	24	19	CRNL6	04
07	EW-TPZ	00	20	POFS2	24
08	BOW	00	21	HSYNC DLY	93
09	ANGLE	00	22	PHP	32
10	EW-UPCR	-12	23	PVP	32
11	EW-LOCR	00			
12	EHT TIME	07			

Item	OSD	Range	Initial Value	Remark
00	V-SIZE	-128~127(4X)	20	DDP3310 R,14Dhex
01	V-SFT	-128~127	06	DDP3310 R,14Fhex
02	V-LIN	-128~127(4X)	00	DDP3310 R,150hex
03	S-CORR	-128~127(4X)	00	DDP3310 R,151hex
04	EW-WTH	-128~127	-71(200)	DDP3310 R,157hex
05	EW-PBI	-128~127	43(-128)	DDP3310 R,159hex
06	H-SFT	-128~127	24	DDP3310 R,144hex
07	EW-TPZ	-128~127	00	DDP3310 R,158hex
08	BOW	-128~127	00	DDP3310 R,14Bhex
09	ANGLE	-128~127	00	DDP3310 R,14Ahex
10	EW-UPCR	-128~127	-12	DDP3310 R,15Ahex
11	EW-LOCR	-128~127	00	DDP3310 R,15Bhex
12	EHT TIME	0~255(X2)	07	DDP3310 R,15Dhex
13	HOR-EHT	-128~127(4X)	-24	DDP3310 R,147hex
14	VER-EHT	-128~127(4X)	-48	DDP3310 R,15Chex
15	EHTVTRS	-128~127(8X)	255	
16	EHTV2	-128~127(4X)	00	
17	EHTH2	-128~127(4X)	00	
18	CRNU6	-128~127	05	
19	CRNL6	-128~127	04	
20	POFS2	-128~127	24	
21	HSYNCDLY	0~255	93	
22	PHP	0~255	32	
23	PVP	0~255	32	



## 4-5 3 Speed, Aging mode & Reset mode

---

### 4-5-1 3-Speed

#### 1. 3-Speed

- 1) Speed up Analog Control three times and Time Speed sixty times to let line productivity be improved Analog Control.
- 2) Enter
  - Display + 3Speed Key
- 3) Cancel
  - The 3-Speed mode is cancelled in Master Power Off
  - Press the 3Speed Key
- 4) OSD : The message "3-SPEED" appears on the center of screen
- 5) No Signal : No AUTO OFF

#### 2. Aging Mode

- 1) Enter : DISPLAY KEY -> FACTORY KEY (FACTORY MODE)
  - > FACTORY KEY (AGING MODE)
  - When the AGING mode is entered, the OSD's are displayed at 100% SIZE WHITE.
  - Mute SOUND
- 2) Cancel
  - FACTORY remote control -> Press the FACTORY Key
  - LOCAL KEY -> Use the Key MATRIX (Panel Key)
  - The AGING mode remains even in MASTER S/W OFF -> ON
  - Cancel the AGING mode only in the above two cases.

#### 3. Factory Reset

- 1) Run "Reset" on the Factory Menu.
- 2) Initialize the other user control data except the items that are adjusted in the Factory Mode.
- 3) Power Off in standby mode.

### 4-5-2 Bus Stop Mode & Remote Control Adjustment

#### 1. Bus Stop Mode (Use a Micom Stop Pin)

- 1) Enter the Bus Stop Mode within 200ms when 12c Stop Port is acknowledged "LOW".
- 2) Settings when entering.
  - Set the screen mode "STANDARD".
  - Set Bus Line Free.
  - Cancel the Bus Stop Mode when 12c Stop Port is acknowledged "High".
- 3) Setting when cancelling
  - Re-load data from EEPROM and then re-set the appropriate IC.

#### 2. Remote Control Adjustment Mode (Factory Auto Adjustment)

- 1) Enter the Remote Control Adjustment Mode when the remote control auto adjustment code is input.
- 2) Settings when entering.
  - Set the screen mode "STANDARD"
  - Set Bus Line Free.
- 3) Cancel the Remote Control Adjustment Mode when the usual key code is input.
- 4) When the code is input, write data in both E2PRM and the appropriate IC within 20ms.
  - Interval between Code Inputs : 30ms

## 4-6 INITIALIZATION DATA DURING RESET

Item	Initialization Data	Item	Initialization Data
Volume	10step	TV Power	Stand by
Balance	Center	Blue Screen	On
Main,Pip Channel	Custom	TINT	Center
Picture Standard	(Set Value:Standard)	Still Picture	Cancel
Sound Standard	Nautral	AV Setup	Ext2,Ext3:RF
Add/erase	All Channel erased	Time	-- : --
Channel Sort	Erased	On/Off Time	-- : --
LNA	All Channel Off	H/P Volume	10 Step
Color System	Auto	H/P Bal.,Tbl,Bass	Center
PIP Position	Right under	Programe naming	All Channel Erased(*)
Fine Tune	Erased	Audio out	Volume out
Language	Option byte Selection	Int.mute	Off
Pip,Main Source	RF	Center,Rear Volume	Center
Digital N/R	Off	Zoom Lift	Center
TILT	Center	PC Screen Shift	Center
P-Size	Wide:auto,4:3:Normal	Country	Austria
PIP-Size	Big		
TTX Contrast	Factory value		
Child lock	All Channel off		
Plug & Play	Option byte Selection		
Surround Mode	Off		
Pro Logic	Normal		

## 4-7 CHASSIS FUNTION

	FUNTION	PAL
P I C T U R E	LINE FLICKERLESS	YES
	LARGE AREA FLICKERLESS	YES
	MOTION DETECTOR	YES
	MAIN STILL PICTURE	YES
	ZOOM FUNCTION	NORMAL -> 16:9 -> ZOOM
	(4:3,WIDE CRT OPTION)	AUTO WIDE->PANORAMA->4:3->16:9->ZOOM1->ZOOM2
	ZOOM LIFT	YES
	DIGITAL N/R	YES
	COMB FILTER	4H
	CTI	DIGITAL CTI
	SCAN MODE	NATURAL SCAN -> DIGITAL SCAN -> PORGRESSIVE SCAN
	P-STD	CUSTOM->STANDARD->SPORTS->MILD->NATURAL
	COLOR TONE	NORMAL -> WARM1- > WARM2 -> COOL1 -> COOL2
	DYNAMIC-FOCUS	YES
	VM	YES
	TILT CONTROL	YES
	VGA	YES
	DVD	RCA JACK MODEL ONLY -> YUV MODE
PIP	MULTI PIP	YES
	LNA ON/OFF	YES
	SWAP,ROTATE,SIZE,SCAN	YES

	FUNTION	PAL
P U N T I O N	ATM	ATM(EU)
	PLUG & PLAY	YES
	AV LINK	SCART JACK MODEL ONLY (SCART1)
	TTX	MEGA TEXT
	OSD TYPE	OSG
	SLEEP TIMER	YES
	ON/OFF TIMER	YES
	CHILD LOCK	YES
	PROGRAMMABLE CH.	100 CH. MENORY
	TUNING SYSTEM	PROGRAMMABLE F/S
	SORT & NAME	YES
	INFORMATION	YES(NAME,SOUND MODE,CHILD LOCK)
	ADD/ERASE	YES(CHANNEL SKIP)
S O U N D	DOLBY PROLOGIC	YES
	A2 STEREO	YES
	EQUALIZER	YES
	NICAM STEREO	YES
	OUTPUT (MPO)	MAIN:12+12W, SUR:12+12W, CENTER:12W
	S-STD	CUSTOM->STANDARD->MUSIC->MOVIE->SPEECH
	HEADPHONE VOLUME CONTROL	YES
EXT JACK	FRONT	1 S-VHS,1RCA INPUT,1HEADPHONE,1 VGA
	REAR	SCART JACK MODEL: 1RF,3SCART,DOLBY JACK
		RCA JACK MODEL:1RF,1 S-VHS,3RCA IN, 1DVD IN, 1 MONITOR OUT, DOLBY JACK

## 4-8 PCF9591 PORT ASSIGNMENT (JACK IDENT)

PIN NO	FUN	ASSIGN	SCART JACK OPTION IDENT VOLTAGE(V)			RCA JACK MODEL IDENT VOLTAGE(V)			
			0~1.5	1.6~3.4	3.5~5.0	0~2.2	2.3~2.7	2.8~4.0	4.1~5.0
1	AINO	SC1-ID(AV1/DVD-ID)	NOT CON.	WIDE MODE	4:3 MODE	NOT CON.	DVD	AV1	ALL CON
2	AIN1	SC2-ID(AV2/DVD-ID)	NOT CON.	WIDE MODE	4:3 MODE	AV2 SVHS		NOT CON.	AV2
3	AIN2	SC3-ID(AV3)	NOT CON.	WIDE MODE	4:3 MODE	NOT CONNECTION		AV3	
4	AIN3	FAV-ID/FS-ID				FRONT-SVHS		NOT CON.	F-VIDEO
5	A0	GND	IC ADDRESS SLECTION						
6	A1	GND							
7	A2	GND							
8	VSS	GND	DIGITAL GND						
9	SDA	SDA2	IIC CONTROL BUS						
10	SCL	SCL2							
11	OSC	OSC	-						
12	EXT	GND	EXT/INT OSC CONTROL						
13	AGND	AGND	ANALOG GND						
14	VREF	VREF	-						
15	AOUT	D/A OUT	NOT USED						
16	VDD	VDD	5V						

### 1. Local(Pannel) Key List

- LOCAL MENU : Main Menu Control
- CH + : Channel Up & Menu Control
- CH - : Channel Down & Menu Control
- VOLUME + : Volume Up & Menu Control
- VOLUME - : Volume Down & Menu Control
- TV/VIDEO : TV/VIDEO MODE CHANGE

### 2. Local Key (8 Bit ADC)

KEY1	KEY NAME	KEY NAME	CH. DOWN	CH. UP	VOL.DOWN	NOT OPER
	VOLTAGE	VOLTAGE	0V~0.62V	0.93V~1.55V	1.86V~2.5V	3.74V~5.00V
KEY2	KEY NAME	KEY NAME		LOCAL MENU	TV VIDEO	NOT OPER
	VOLTAGE	VOLTAGE	0V~0.62V	0.93V~1.55	1.86V~2.5V	3.74V~5.00V

NO	Europe	Asia	Remark
1	English	English	
2	Bulgarian	Arabic	
3	Croatian	French	
4	Czech	Indonesian	
5	Dutch	Malay	
6	French	Persian	
7	German	Urdu(Pakistani)	
8	Greek		
9	Hungarian		
10	Italian		
11	Polish		
12	Portuguese		
13	Rumanian		
14	Russian		
15	Spanish		
16	Swedish		
17	Turkish		
18	Yogo		

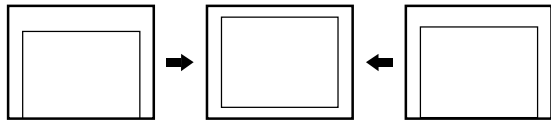
NO	X22 line			Factory mode TTX Group					
	C14	C13	C13	W-Europe	E-Europe	Russian	Arab	Ireland	Hebrew
0	0	0	0	English	Polish	Polish	English/ Arabic	English	English
1	0	0	1	French	Russian	Russian	French/ Arabic	French	French
2	0	1	0	Swedish/ Finnish/ Danish	Hungarian	Estonian	Thai	Swedish/ Finnish/ Danish	Swedish/ Finnish/ Danish
3	0	1	1	Turkish	Czech/ Slovak	Czech/ Slovak	Turkish	Turkish	Turkish
4	1	0	0	German/ Dutch/ Flemish	German/ Dutch/ Flemish	German/ Dutch/ Flemish	German/ Dutch/ Flemish	German/ Dutch/ Flemish	German/ Dutch/ Flemish
5	1	0	1	Spanish/ Portuguese	Slovenian/ Serbo	Ukranian	Spanish/ Portuguese	Icelandic	Hebrew/ Arabic
6	1	1	0	Italian	Lithuanian	Lettish	Italian	Italian	Italian
7	1	1	1	Greek	Rumanian	Rumanian	Arabic	Greek	Rumanian



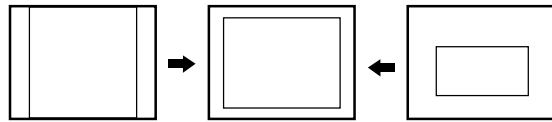
## 4-10 Screen Change (I2C Bus Geometric Adjustment)

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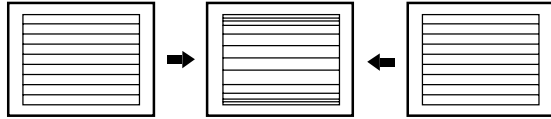
1 V - SHIFT



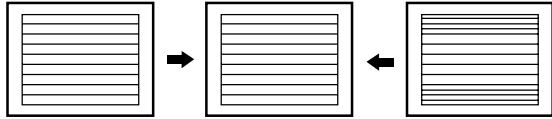
6 V - SIZE



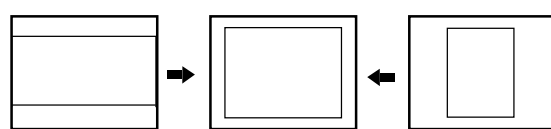
2 V - LIN



7 S-CORR



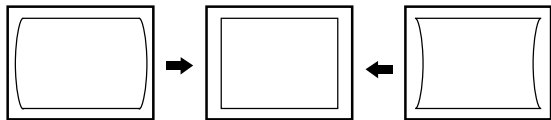
3 HEW- WITH



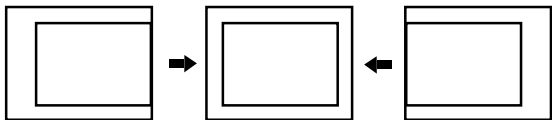
8 H TRAPIZIUM (EW)



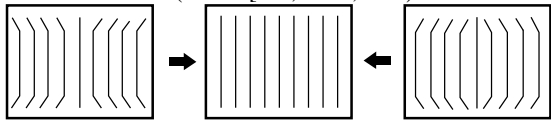
4 H PARABOLA (EW)



9 H SHIFT

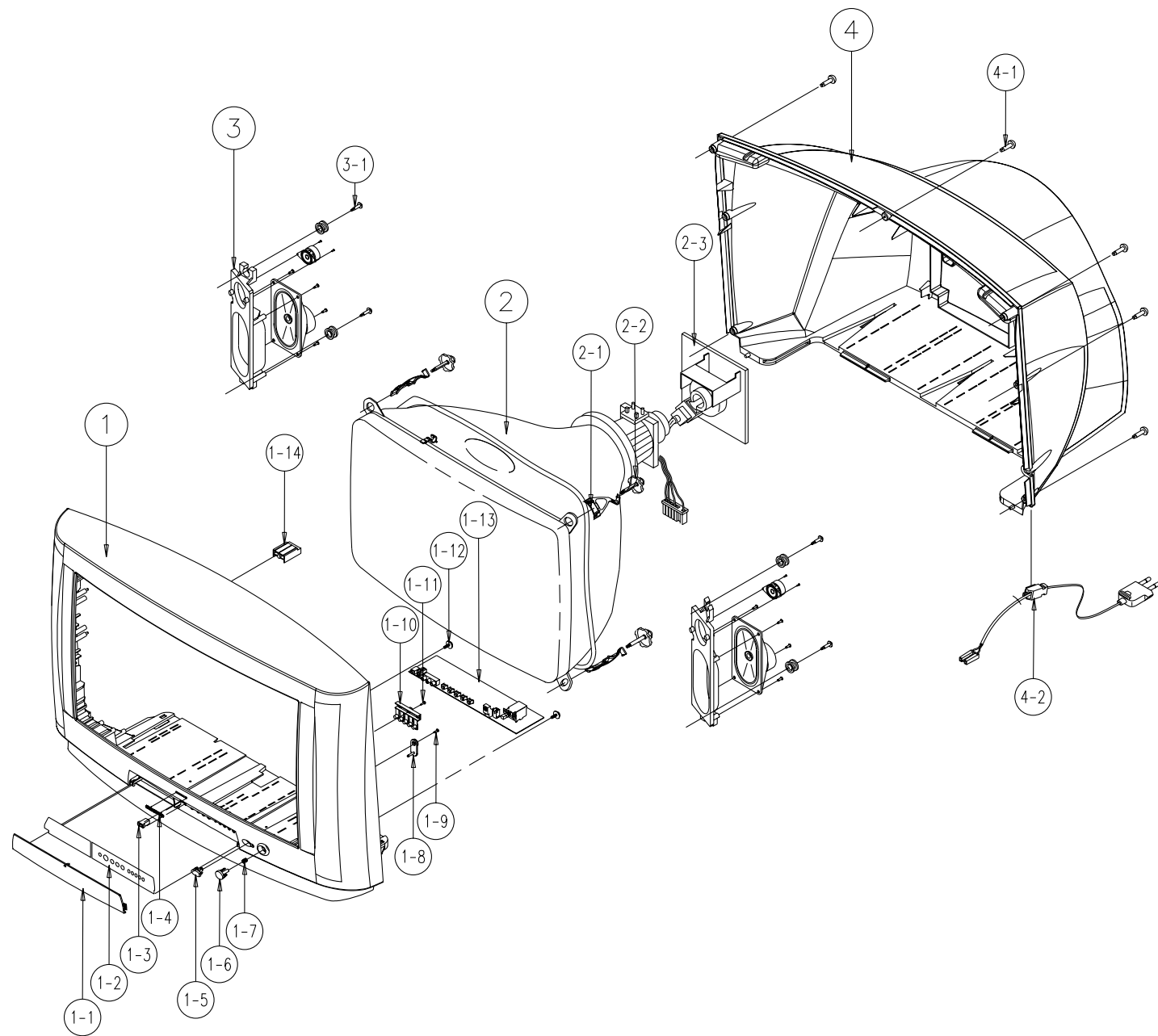


5 H CORNER (EW-V[CR, EW-;PCR)



5. Exploded View & Parts List

5-1 WS32W68AS9XSEC



No	Code No	Description;Specification	Q'ty	Remark
1	HA91-20025A	ASSY-CABINET,FRONT;32W6H,D4,SILVER	1	
	HA64-20025A	CABINET,FRONT;32W6H,HIPS,HB,SV-012P-II,	1	
1-1	HA64-27019A	DOOR-CONTROL;28W6,HIPS,HB,SV-012P-II	1	
1-2	AA64-00007B	INLAY-CONTROL;32W6,PS SHEET,T0.3,-,-,BLK,SCT	1	
1-3	AA61-30001A	CATCH-DOOR;-,-,-,KIFUCO LA701,-	1	
1-4	AA64-70117B	BADGE-BRAND;-,AL,-,-,L65,R2000,SILVER,SS	1	
1-5	AA64-00002A	WINDOW-REMOCON;- ,28W6,-,PC,V0,LG41338,-	1	
1-6	HA64-25013A	KNOB-POWER;28W6,HIPS,SV-012P-II,SILVER	1	
1-7	AA61-60005K	SPRING-CS;- ,SUS304,-,-,OD12.2,N4,OD12.2,	1	
1-8	AA64-00191A	INDICATOR-LED;- ,28C7,-,ACRYL,-,CLR,-	1	
1-9	HA60-020003	SCREW-TAPPING;RH,+,2,M4,L15,ZPC(BLK),SWRCH18	1	
1-10	HA64-24016A	KNOB-CONTROL;28C7,HIPS,HB,GRAY	1	
1-11	HA60-020003	SCREW-TAPPING;RH,+,2,M4,L15,ZPC(BLK),SWRCH18	1	
1-12	HA60-020011	SCREW-TAPTITE;RH,M4,L20,BLK	2	
1-13	HA95-900036	ASSY-PCB,CONTROL;32W6,KS4A	1	
1-14		ASSY-CABINET,FRONT OPTION		
2	AA03-00122A	CRT-COLOR;- ,W76EGX023X522,100HZ,+,380MG,3	1	
2-1	AA65-30113A	CLAMP-D,COIL;NYLON 66,V2,BLK,TVI 25-29,-,-	4	
2-2	HA60-020012	SCREW-ASSY;WC,HH,+,M5,L30,SWRCH18A,ZPC	4	
2-3	HA95-00752A	ASSY-PCB,CRT;32W6,KS4A	1	
3	AA91-00415A	ASSY HOLDER SPK;-,-,-,WF(130x70)+TW(50mm),WS	1	
3-1	HA60-10050A	SCREW-ASSY;WP,RH,+,M4,L25,SWRCH18A,-,ZPC	4	
4	HA64-22023A	CABINET-BACK;32W6,HIPS,HB,GRAY	1	
4-1	HA60-020011	SCREW-TAPTITE;RH,M4,L20,BLK	8	
4-2	AA96-00094A	ASSY-POWER,CORD;DP,CP2/NO(4.0),H/C350MM,KJP140	1	

6. Electrical Parts List

6-1 WS32W68AS9XXEC

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
ASSY-PCB,CHASSIS				C656	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5	
0.1 *	HA93-00005A	ASSY-PCB,CHASSIS;32W6,KS4A		...4C657	2401-000962	AL;22uF,20%,50V,GP,TP,5x11,5	
..2 *	HA94-02375A	ASSY-PCB,MAIN(OPT);32W6,KS4A		C659	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5	
C103	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C660	2301-000232	C-FILM,PEF;3.3nF,5%,50V,TP,8.1x4.5x13mm,5	
C104	2202-000632	C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP,2.5x4.3,-		C661	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
C107	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5		C663	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C108	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C664	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
C109	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5		C702	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C110	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C704	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C111	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C705	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C112	2202-000632	C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP,2.5x4.3,-		C706	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
...4C113	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5		C708	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C202	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C709	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C203	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C710	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C204	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C712	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C205	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C714	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C601	2401-000480	C-AL;10uF,20%,50V,GP,TP,5x11,5		C715	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
C602	2202-000222	C-CERAMIC,MLC-AXIAL;3.3nF,20%,16V,Y5P,TP,-,7.5		C716	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C603	2301-000111	C-FILM,PEF;1.8nF,5%,50V,TP,6.5x3.0x5.5mm,		C717	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C605	2202-000222	C-CERAMIC,MLC-AXIAL;3.3nF,20%,16V,Y5P,TP,-,7.5		C718	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C606	2301-000111	C-FILM,PEF;1.8nF,5%,50V,TP,6.5x3.0x5.5mm,		C719	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C608	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-		C720	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C610	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C721	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C611	2202-000796	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3.5x19,-		C722	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C616	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM		C723	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP;1.9x3.5,-	
C617	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C724	2305-000355	C-FILM,MPEF;330nF,5%,63V,TP,-,5mm	
C618	2201-000558	C-CERAMIC,DISC;0.47nF,10%,50V,Y5P,TP,5x3,5		C725	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
...4C619	2201-000374	C-CERAMIC,DISC;0.22nF,5%,50V,NP0,TP,10.5x3,5		C726	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
...4C620	2201-000112	C-CERAMIC,DISC;1.5nF,10%,50V,Y5V,TP,5x3,5,5		C727	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C621	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM		C728	2305-000355	C-FILM,MPEF;330nF,5%,63V,TP,-,5mm	
...4C622	2401-001026	C-AL;3.3uF,20%,50V,GP,TP,5x11mm,5mm		C729	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C623	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C730	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C624	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM		C731	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C625	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM		C732	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
C626	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM		...4C733	2201-000982	C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6.5x3,	
C627	2202-000632	C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP,2.5x4.3,-		C734	2401-001363	C-AL;470uF,20%,16V,GP,TP,10x12.5mm,	
C628	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM		C735	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
C629	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C740	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C630	2201-000558	C-CERAMIC,DISC;0.47nF,10%,50V,Y5P,TP,5x3,5		C741	2401-002235	C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM	
C631	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.9x3.5,-		C742	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C632	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.9x3.5,-		C743	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C633	2201-000304	C-CERAMIC,DISC;0.001nF,0.25pF,50V,NP0,TP,4x3.		C744	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C634	2201-000304	C-CERAMIC,DISC;0.001nF,0.25pF,50V,NP0,TP,4x3.		C745	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
C635	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5		C746	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C636	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5		C801	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11,5,5	
C637	2301-000232	C-FILM,PEF;3.3nF,5%,50V,TP,8.1x4.5x13mm,5		C802	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C638	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C803	2401-001363	C-AL;470uF,20%,16V,GP,TP,10x12.5mm,	
C639	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C804	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C640	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C805	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11,5,5	
C641	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C806	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C642	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C807	2401-001363	C-AL;470uF,20%,16V,GP,TP,10x12.5mm,	
C643	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C808	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C644	2401-002458	C-AL;1000uF,20%,35V,GP,TP,16x25,7,5		C809	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11,5,5	
C645	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C810	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C646	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,		C811	2401-001363	C-AL;470uF,20%,16V,GP,TP,10x12.5mm,	
C647	2401-002458	C-AL;1000uF,20%,35V,GP,TP,16x25,7,5		C812	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C648	2401-000027	C-AL;4.7uF,20%,50V,GP,TP,5x11,5		C813	2401-001363	C-AL;470uF,20%,16V,GP,TP,10x12.5mm,	
C649	2202-000183	C-CERAMIC,MLC-AXIAL;2.2nF,20%,16V,Y5R,TP,3.5x19,-		C814	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C650	2401-000832	C-AL;220uF,20%,25V,GP,TP,8x11,5,5		C815	2401-001363	C-AL;470uF,20%,16V,GP,TP,10x12.5mm,	
C651	2401-000027	C-AL;4.7uF,20%,50V,GP,TP,5x11,5		C816	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
C652	2202-000183	C-CERAMIC,MLC-AXIAL;2.2nF,20%,16V,Y5R,TP,3.5x19,-		C819	2401-001363	C-AL;470uF,20%,16V,GP,TP,10x12.5mm,	
C653	2401-002216	C-AL;2200uF,20%,35V,GP,TP,16x25,7,5		C820	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
...4C654	2201-000119	C-CERAMIC,DISC;100nF,+80-20%,50V,Y5V,TP,8x3,5		...4C825	2401-000287	C-AL;100uF,20%,16V,WT,TP,6.3x11,5	
C655	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5		C901	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
				C902	2305-000665	C-FILM,MPEF;100NF,5%,63V,TP,7.5X4.0X5.0MM,	
				C903	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
				C905	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
C906	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		DS01	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
CB01	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		DZ101	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,TP	
CB02	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4DZ201	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500mW,DO-	
CD01	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4DZ202	0403-001320	DIODE-ZENER:MTZJ6.2C,6.12-6.44V,500mW,DO-3	
CD02	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		DZ203	0403-000367	DIODE-ZENER:UZ7.5BSC,7.5V,7.33-7.64V,500mW	
CD03	2401-002458	C-AL:1000uF,20%,35V,GP,TP,16x25,7.5		...4DZ601	0403-001316	DIODE-ZENER:MTZJ3.0A,2.85-3.07V,500mW,DO-3	
CD04	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		DZ602	0403-000367	DIODE-ZENER:UZ7.5BSC,7.5V,7.33-7.64V,500mW	
CD05	2401-002458	C-AL:1000uF,20%,35V,GP,TP,16x25,7.5		DZ603	0403-000367	DIODE-ZENER:UZ7.5BSC,7.5V,7.33-7.64V,500mW	
CD06	2401-002216	C-AL:2200uF,20%,35V,GP,TP,16x25,7.5		DZD01	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,TP	
CD07	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		DZD02	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,TP	
CD08	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		...3H001	AA95-01055A	ASSY-PCB,FEATURE BOX,DPK54A,AA95-00737	
CD09	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		...3H002	AA95-01056A	ASSY-PCB,MICOM:DPK54A,AA95-00764A	
CD10	2202-000183	C-CERAMIC,MLC-AXIAL:2.2nF,20%,16V,Y5R,TP,3.5x19,-		...3H005	AA95-01057A	ASSY-PCB,DOLBY:DPK54A,AA95-00898A	
CD11	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5		...3IC101	1001-001038	IC-ANALOG SWITCH:IC-ANALOG SWITCH:SAAT1300,-,SOT	
CD12	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		...3IC601	1204-001775	IC-SOUND PROCESSOR:MSP3410D-C5 9458 ,SDIP,52P,-,P	
CD13	2202-000183	C-CERAMIC,MLC-AXIAL:2.2nF,20%,16V,Y5R,TP,3.5x19,-		...3IC602	1201-000407	IC-POWER AMP:IC-POWER AMP:7050,DIP,8P,-,SIN	
CD14	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5x19,-		IC603	HA96-50367A	ASSY-H/S,-,AA62-30181D,TDA7265,-	
CD15	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5x19,-		IC603	HA96-50367A	ASSY-H/S,-,AA62-30181D,TDA7265,-	
CD16	2301-000111	C-FILM,PEF:1.8nF,5%,50V,TP,6.5x3.0x5.5mm,		...4IC603	1201-001026	IC-POWER AMP:7265,ZIP,11P,19.6MIL,DUAL,1000	
CD17	2301-000111	C-FILM,PEF:1.8nF,5%,50V,TP,6.5x3.0x5.5mm,		...4IC603	HA60-020007	SCREW-TAPTITE:RH,+,2S,M3,L10,ZPC(YEL),SWRCH1	
CD18	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4IC603	AA62-30181D	HEAT SINK-ES:-,AL6063 EXTR.,2,WHT,70MM,-,AN	
CD19	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4IC603	0205-000129	GREASE-SILICON:SC102,JAPAN	
CG01	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...3IC701	1001-001073	IC-VIDEO SWITCH:TEA6415C,VIDEO SWITCH,DIP,20P,	
CG02	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		IC702	1001-001113	IC-AUDIO SWITCH:TEA6422,SOUND SWITCH ,SDIP,24P	
CG03	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		...3IC703	1002-001193	IC-A/D&D/A CONVERTER:PCF8591P,8bit,DIP,16P,300MIL,	
CG04	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		...3IC801	1203-000165	IC-POSIAJUST REG.:78R12,TO-220,3P,-,12V,-,0to+	
CG05	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...3IC802	HA96-50147B	ASSY-H/S,-,TR,AA62-30012B,KA7808,-	
...3CJ701A	3722-000195	JACK-SCART:42P,-,SN,BLK,NO		...4IC802	1203-000293	IC-POSIFIXED REG.:IC-POSIFIXED REG.:7808,TO-220	
...3CJ704A	3722-000183	JACK-SCART:21P,4mm,SN,BLK,NO		...4IC802	HA60-020007	SCREW-TAPTITE:RH,+,2S,M3,L10,ZPC(YEL),SWRCH1	
CN501A	3711-003641	CONNECTOR-HEADER:BOX,12P,1R,2.5mm,STRAIGHT,SN		...4IC802	AA62-30012B	HEAT SINK-ES:-,A6063 EXTR,-,45(16) TO220,	
...3CN601	3711-003043	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGHT,sn		...3IC803	HA96-50147C	ASSY-H/S,-,TR,AA62-30012B,KA7809A,-	
CN702A	3711-003641	CONNECTOR-HEADER:BOX,12P,1R,2.5mm,STRAIGHT,SN		...4IC803	1203-000298	IC-POSIFIXED REG.:7809,TO-220,3P,-,PLASTIC,8.65/	
CN803A	3711-003241	CONNECTOR-HEADER:CONNECTOR-HEADER:BOX,14P,1R,2.		...4IC803	HA60-020007	SCREW-TAPTITE:RH,+,2S,M3,L10,ZPC(YEL),SWRCH1	
CN804A	3711-003241	CONNECTOR-HEADER:CONNECTOR-HEADER:BOX,14P,1R,2.		...4IC803	AA62-30012B	HEAT SINK-ES:-,A6063 EXTR,-,45(16) TO220,	
...3CN901A	3711-002648	CONNECTOR-HEADER:BOX,9P,1R,2.5mm,STRAIGHT,SN		IC804	HA96-50382B	ASSY-H/S,-,AA62-30180C,SI-3050,-	
...4CN902A	3711-002646	CONNECTOR-HEADER:BOX,7P,1R,2.5MM,STRAIGHT,SN		...4IC804	1203-000203	IC-POSIAJUST REG.:3050,TO-220,5P,-,PLASTIC,5V,1.	
...4CND01	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5MM,STRAIGHT,SN		IC805	HA96-50382B	ASSY-H/S,-,AA62-30180C,SI-3050,-	
...4CND02	3711-002645	CONNECTOR-HEADER:BOX,6P,1R,2.5MM,STRAIGHT,SN		IC805	1203-000203	IC-POSIAJUST REG.:3050,TO-220,5P,-,PLASTIC,5V,1.	
CS01	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4IC805	HA60-020007	SCREW-TAPTITE:RH,+,2S,M3,L10,ZPC(YEL),SWRCH1	
CS02	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4IC805	AA62-30180C	HEAT SINK-ES:-,A6063 EXTR.,2,WHT,50MM,-,ANO	
CS03	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4IC805	0205-000129	GREASE-SILICON:SC102,JAPAN	
CS04	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...3IC905	1103-001213	IC-EEPROM:M24C16-WB6N,2048x8Bit,SDIP,8P,	
CS05	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...3ICD02	1201-000191	IC-OP AMP:4558,DIP,8P,300MIL,DUAL,20V/mV	
CS06	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...3ICS01	1001-001114	IC-VIDEO SWITCH:TEA6425,VIDEO SWITCH ,DI	
CS07	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		ICS02	1001-001113	IC-AUDIO SWITCH:TEA6422,SOUND SWITCH ,SDIP,24P	
CS08	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...3ICS03	1001-000223	IC-VIDEO SWITCH:TEA5114A,-,DIP,16P,334MIL,SING	
CS09	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		KEZI	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5	
CS12	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		KEZI	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
CS13	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4KEZI	0403-000701	DIODE-ZENER:DIODE-ZENER:TZP5.1A,5.1V,4.8-5	
CS14	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		...4KEZI	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
CS15	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		L102	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS16	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		L103	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS17	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-		...4L104	2701-000116	INDUCTOR-AXIAL:10uH,10%,4.2x9.8mm	
CS18	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-		L106	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
CS19	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-		L107	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
CS20	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-		...4L201	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-,TP,HF30	
CS23	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm		...4L601	2701-000170	INDUCTOR-AXIAL:3.9uH,10%,3x7mm	
CS24	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm		L602	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
CS25	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm		L603	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
CS26	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm		L701	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
CS27	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm		L702	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS28	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm		L703	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS29	2401-002235	C-AL:10UF,20%,16V,GP,TP,5X11MM,5MM		L704	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS30	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		L705	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS32	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		L706	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS33	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		L707	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
CS34	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		L708	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
CS35	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		L709	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
D201	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		L710	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
D202	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		L801	2701-001040	INDUCTOR-AXIAL:10uH,10%,4.5x14mm	
D203	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		L802	2701-001040	INDUCTOR-AXIAL:10uH,10%,4.5x14mm	
D601	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		L901	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
D602	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		L902	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
D603	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		LG01	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
D604	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		LS01	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
...4D801	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L,TP		LS02	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
DG01	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP		LS03	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	

Loc. No.	Code No.	Description ; Specification	Remark
LS04	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5X3.4MM	
LS07	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
LS08	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
...4PCB	AA41-00156D	PCB-MAIN:TSK2790FX/XAC,FR-1,1A,D,1.6T,3	
Q201	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q202	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q601	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q602	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q603	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q701	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
Q702	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q703	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q704	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q705	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q706	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q711	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q712	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
Q901	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
Q902	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP	
QG01	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
QG02	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
QS02	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
QS03	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
QS04	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
R101	2001-001006	R-CARBON:82ohm,5%,1/8W,AA,TP,1.8X3.2mm	
R102	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R104	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R105	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4R110	2003-001093	R-METAL OXIDE(S):12KOHM,5%,2W,AF,TP,3.9X10MM	
R115	2001-001006	R-CARBON:82ohm,5%,1/8W,AA,TP,1.8X3.2mm	
R203	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R204	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R208	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R209	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R210	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R211	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R214	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R215	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R216	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4R217	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R218	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R219	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R220	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R225	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R226	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R227	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R601	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R602	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R603	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R604	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4R607	2001-000577	R-CARBON:2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R608	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R609	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R610	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R611	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R612	2001-001146	R-CARBON(S):4.7OHM,5%,1/2W,AA,TP,2.4X6.4MM	
R613	2001-001146	R-CARBON(S):4.7OHM,5%,1/2W,AA,TP,2.4X6.4MM	
...4R614	2001-001187	R-CARBON(S):75OHM,5%,1/2W,AA,TP,2.4X6.4MM	
R615	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R616	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R617	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R618	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R619	2001-001146	R-CARBON(S):4.7OHM,5%,1/2W,AA,TP,2.4X6.4MM	
R620	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R621	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R622	2001-001146	R-CARBON(S):4.7OHM,5%,1/2W,AA,TP,2.4X6.4MM	
R623	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R624	2001-001050	R-CARBON(S):1.5Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R625	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R626	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R627	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R628	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R629	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R630	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4R631	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R632	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R635	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

Loc. No.	Code No.	Description ; Specification	Remark
R637	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R638	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R639	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R701	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R702	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R703	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R704	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R705	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R706	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R708	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R709	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R710	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R711	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R719	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4R720	2001-000938	R-CARBON:68ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R721	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R722	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R724	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R727	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R728	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R729	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R731	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R732	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R733	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R735	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R736	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R737	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R738	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R739	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R740	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R741	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R742	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R743	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R744	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R745	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R746	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R748	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R749	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R750	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R751	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R752	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R758	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R759	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R760	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R761	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R762	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R763	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R764	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R901	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R902	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R903	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R904	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R905	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R906	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R907	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R908	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RC103	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RD02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RD03	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RD10	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
RD11	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
RD12	2001-001146	R-CARBON(S):4.7OHM,5%,1/2W,AA,TP,2.4X6.4MM	
RD13	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RD14	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
RD15	2001-001146	R-CARBON(S):4.7OHM,5%,1/2W,AA,TP,2.4X6.4MM	
RD16	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
RD17	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RD18	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RD19	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
RD20	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
RD21	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RD22	2001-001108	R-CARBON(S):22KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
RD23	2001-001108	R-CARBON(S):22KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
RD24	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RD25	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RD26	2001-001050	R-CARBON(S):1.5Kohm,5%,1/2W,AA,TP,2.4x6.4m	
RD27	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
RD28	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM		C431	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5	
RD29	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		C440	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.5x3,5	
RD30	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C453	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5	
RD31	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C454	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP,5.5x3,5	
RD32	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C803	2201-000315	C-CERAMIC,DISC:2.2nF,+80-20%,250VAC,Y5U,TP,9x	
RG01	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C804	2201-000119	C-CERAMIC,DISC:100nF,+80-20%,50V,Y5V,TP,8x3,5	
RG02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		...4C805	2201-002076	C-CERAMIC,DISC:0.068nF,5%,1kV,SL,TP,8x4mm,5	
RG04	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C806	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11,5,5	
RG05	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		...4C808	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x4,5mm	
RG06	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C809	2306-000323	C-FILM,MPPF:2.2nF,5%,1.6KV,TP,28.5x15.5x8.	
RG08	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		...4C810	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5	
RS01	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C812	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250VAC,Y5U,TP,11x7,7	
RS02	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C813	2401-003370	C-AL:C-AL:47uF,20%,450V,GP,BK,16x35	
RS03	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C814	2401-003465	C-AL:680UF,20%,450V,GP,BK,35X60MM,	
RS04	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C816	2201-002041	C-CERAMIC,DISC:0.82nF,10%,2kV,Y5P,TP,9x5,7,5	
RS07	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C817	2303-000118	C-FILM,PPF:10nF,5%,1.6KV,BK,31x19.5x13,20	
RS08	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C818	2201-000551	C-CERAMIC,DISC:0.47nF,10%,1kV,Y5P,TP,6.3x5,5	
RS09	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C819	2401-002287	C-AL:470uF,20%,200V,WT,BK,22x40,10	
RS10	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C820	2401-003024	C-AL:220uF,20%,200V,WT,TP,22x35,10	
RS11	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		C821	2201-000551	C-CERAMIC,DISC:0.47nF,10%,1kV,Y5P,TP,6.3x5,5	
RS12	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C822	2401-000737	C-AL:2200uF,20%,50V,GP,TP,18x35,5,7	
RS13	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		C824	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.5x3,5	
RS14	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		C825	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25,7,5	
RS15	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		C826	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25,7,5	
RS16	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		C828	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25,7,5	
...4RS17	2001-000708	R-CARBON:39OHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C829	2401-001397	C-AL:470uF,20%,25V,GP,10x16mm,5mm,T	
RS18	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C833	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm	
RS19	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		C834	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
RS20	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		C835	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.5x3,5	
RS21	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		...4C838	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12,5mm,	
RS22	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		C839	2201-000551	C-CERAMIC,DISC:0.47nF,10%,1kV,Y5P,TP,6.3x5,5	
RS23	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		...4CH01	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5	
RS24	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		CH02	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5	
RS25	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		CH04	2301-001041	C-FILM,PPF:15nF,5%,1.6KV,TP,29x14x21,5,20	
RS26	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		CH05	2301-001041	C-FILM,PPF:15nF,5%,1.6KV,TP,29x14x21,5,20	
RS27	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		CH06	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5	
RS28	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		...4CH07	2401-000287	C-AL:100uF,20%,16V,WT,TP,6.3x11,5	
RS29	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		CH08	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
RS30	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		CH11	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5	
RS31	2001-000302	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		...3CN801	3711-002641	CONNECTOR-HEADER-BOX,10P,1R,2.54MM,STRAIGHT,SN	
...3TU01	AA40-00015A	TUNER-F/S:TCPW3001PD09A(S),PAL/SECAM,TR		CN803	3710-001103	CONNECTOR-SOCKET:14P,1R,2.5mm,STRAIGHT,SN	
...4X601	2801-003903	CRYSTAL-UNIT:18.432MHz,25ppm,28-AAM,12pF,20		CN804	3710-001103	CONNECTOR-SOCKET:14P,1R,2.5mm,STRAIGHT,SN	
ASSY-PCB,POWER				...3CS01	2301-001268	C-FILM,PPF:33nF,5%,630V,TP,20x11x17,7,5	
..2 *	HA95-00614A	ASSY-PCB,POWER:32W6,KS4A		CX801S	2306-000318	C-FILM,MPPF:220nF,20%,250V,TP,-,22.5mm	
...4C301	2301-000160	C-FILM,PEF:12nF,5%,50V,TP,11.0x6.0x9.0mm,		CX802S	2306-000318	C-FILM,MPPF:220nF,20%,250V,TP,-,22.5mm	
...4C302	2201-000132	C-CERAMIC,DISC:0.1nF,10%,500V,Y5P,TP,6.5x3,5		...3CX803S	2306-000112	C-FILM,MPPF:100nF,20%,250V,BK,-,15mm	
...4C304	2401-000365	C-AL:100uF,20%,50V,WT,TP,10x12.5mm,		CY801S	2201-000539	C-CERAMIC,DISC:4.7nF,20%,250V,Y5V,BK,16x7,10	
...4C305	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5		CY802S	2201-000539	C-CERAMIC,DISC:4.7nF,20%,250V,Y5V,BK,16x7,10	
...4C306	2305-000285	C-FILM,MPEF:220nF,5%,100V,TP,20x18x11.5,15		D301	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...4C307	2305-000149	C-FILM,MPEF:100nF,5%,100V,TP,12x12.5x6,5,5		D401	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
...4C401	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5m		D402	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
...3C402	2301-000213	C-FILM,PEF:220nF,5%,250V,TP,21.5x11,7,5		...4D403	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
C406	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11.5,5		...4D404	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L,TP	
...3C407	2303-000296	C-FILM,PPF:18nF,0.05,630V,BK,20x16x9.5mm		D405	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,TP	
C408	2303-001015	C-FILM,PPF:5.5nF,5%,1.6kV,TP,29x9.5x17,20		D406	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,TP	
...3C409	2306-000204	C-FILM,MPPF:430nF,5%,400V,TP,26x20.5x12.		...4D407	0402-001296	DIODE-RECTIFIER:FMP-3FU,1.5KV,5A,TO-3PF,ST	
...4C410	2301-000188	C-FILM,PEF:1nF,5%,100V,TP,10.5x12.5x6,5,5		D408	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP	
...3C411	2301-001143	C-FILM,PPF:56nF,5%,400V,TP,20x10x17,7,5		D409	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP	
...3C412	2301-001192	C-FILM,MPPF:820nF,5%,400V,TP,29x18.5x25,5,		D411	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...3C413	2306-000324	C-FILM,MPPF:3.3nF,5%,1.6KV,TP,28.5x13.5x8,		D412	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
...4C416	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5m		D801	0402-001111	DIODE-RECTIFIER:1N5397GP,600V,1.5A,DO-204AC,TP	
...4C417	2401-000927	C-AL:22UF,20%,250V,GP,TP,13X20MM,5M		D802	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...4C418	2201-000291	C-CERAMIC,DISC:1nF,10%,500V,Y5P,TP,8.5x5MM,5		D803	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...3C419	2306-000273	C-FILM,MPPF:82nF,5%,400V,BK,19x15.5x7,15mm		...3D804	0402-000250	DIODE-RECTIFIER:DIODE-RECTIFIER:RG4C,1000V,1A,	
C420	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.5x3,5		...4D805	0402-000532	DIODE-RECTIFIER:ERC13-08,800V,1.2A,DO-204	
C421	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.5x3,5		...3D806	HA96-50310A	ASSY-H/S,-,POWER,AA62-30150C,RBV606,-	
C422	2201-000556	C-CERAMIC,DISC:0.47nF,10%,500V,Y5P,TP,5.5x3,5		...4D806	0402-001399	DIODE-BRIDGE:GSIB660,600V,6A,SIP-4,BK-	
...4C423	2401-001655	C-AL:680uF,20%,25V,GP,TP,10x20,5		...4D806	AA60-30003A	WASHER:-,-,T1.5,-,SBHG-1,-	
...4C424	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5,5		...4D806	AA62-30150C	HEAT SINK-ES:-,A6063 EXTR,-,WHT,40(24.5)-,	
...4C425	2305-000178	C-FILM,MPEF:10nF,5%,100V,TP,-,5mm		...4D806	HA60-020007	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SWRCH1	
C427	2303-001015	C-FILM,PPF:5.5nF,5%,1.6kV,TP,29x9.5x17,20		...4D806	0205-000129	GREASE-SILICON:SC102,JAPAN	
...4C428	2301-000261	C-FILM,PEF:4.7nF,5%,100V,TP,10.5x12.5x6.		D807	0402-001111	DIODE-RECTIFIER:1N5397GP,600V,1.5A,DO-204AC,TP	
...4C430	2401-001655	C-AL:680uF,20%,25V,GP,TP,10x20,5		...4D808	1405-000152	VARISTOR:560V,2500A,14X8.5MM,TP	
				...4D811	1405-001030	VARISTOR:VARISTOR:120V,2500A,14X8.5MM,T	
				D812	0403-000716	DIODE-ZENER:DIODE-ZENER:MTZJ4.7B,4.7V,4.55	
				D813	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,TP	
				D815	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO-3	

Loc. No.	Code No.	Description ; Specification	Remark
D816	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
...3 D817	HA96-00309A	ASSY H/S:-,POWER,AA62-00061A,FML-G12S +	
...4 D817	0402-000231	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-	
...4 D817	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-	
D817	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-	
...4 D817	6003-000335	SCREW-TAPTITE:RH,+,2S,M3,L8,ZPC(YEL),SWRCH18	
...4 D817	AA62-00061A	HEAT SINK-PS:-,T1.0,SILVER,-,-,-,104*41	
...4 D817	0205-000129	GREASE-SILICON:SC102,JAPAN	
D818	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-	
...3 D819	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-	
D820	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
D821	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
DH01	0402-000254	DIODE-RECTIFIER:RGP10J,600V,1A,DO-41,TP	
DH02	0402-000254	DIODE-RECTIFIER:RGP10J,600V,1A,DO-41,TP	
DS01	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
DS02	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
DZ301	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,DO-	
DZ302	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,DO-	
...4 DZ303	0403-001221	DIODE-ZENER:UZ39BSB,35.36-37.19V,500mW,DO-	
...4 DZ304	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,TP	
DZ305	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,DO-	
DZ306	0403-000716	DIODE-ZENER:DIODE-ZENER:MTZJ4.7B,4.7V,4.55	
...4 DZ401	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500mW,DO-	
DZ402	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,DO-	
DZ801	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO-3	
...4 DZ802	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500mW	
...4 DZ803	0403-001327	DIODE-ZENER:MTZJ18A,16.22-17.06V,500mW,DO-	
...4 DZ804	0403-000701	DIODE-ZENER:DIODE-ZENER:TZP5.1A,5.1V,4.8-5	
FA801S	3601-001086	FUSE-AXIAL LEAD:125V,5A,FAST-ACTING,GLASS,2.4x	
FA802S	3601-001086	FUSE-AXIAL LEAD:125V,5A,FAST-ACTING,GLASS,2.4x	
...4 FD802S	3601-000120	FUSE-AXIAL LEAD:125V,2.5A,FAST-ACTING,GLASS,2.	
FP801A	3602-000114	FUSE-HOLDER:-,30MOHM	
FP801B	3602-000114	FUSE-HOLDER:-,30MOHM	
...4 FP801S	3601-001007	FUSE-CARTRIDGE:250V,6.3A,TIME-LAG,GLASS,5.2x2	
...3 IC301	HA96-50381A	ASSY H/S:-,AA62-30180B,LA7845,-	
...4 IC301	1204-000517	IC-VERTICAL DEF:LA7845,SIP7P,-,PLASTIC,40V,11	
...4 IC301	HA60-020007	SCREW-TAPTITE:RH,+,2S,M3,L10,ZPC(YEL),SWRCH1	
...4 IC301	AA62-30180B	HEAT SINK-ES:-,A6063 EXTR,2,WHT,70MM,-,ANO	
...4 IC301	0205-000129	GREASE-SILICON:SC102,JAPAN	
...3 IC403	1202-000103	IC-VOLTAGE COMP:393,DIP8P,300MIL,DUAL,36V,CMO	
...3 IC801S	HA96-50364C	ASSY H/S:-,POWER,AA62-30181A,STR-F6656,-	
...4 IC801S	HA60-020007	SCREW-TAPTITE:RH,+,2S,M3,L10,ZPC(YEL),SWRCH1	
...4 IC801S	AA13-00024A	IC-HYBRID:-,STR-F6656,LF1351,5PIN,-,-	
...4 IC801S	AA62-30181A	HEAT SINK-ES:A6063,EXTR,SILVER,WHT,ANOD,-,-	
...4 IC801S	0205-000129	GREASE-SILICON:SC102,JAPAN	
...3 IC803S	AA13-00024A	IC-HYBRID:-,TNY253P,-,8PIN,-,-	
...3 IC801	1201-000191	IC-OP AMP:4558,DIP8P,300MIL,DUAL,20V/mV	
J105	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
J106	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
J118	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
J125	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
J127	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
J130	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
J135	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
J173	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
L302	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
L303	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
...3 L401	AA27-100057A	COIL-HORIZ,WIDTH:-,10mH,YL-9N 15x27.5 C:9.5,0.3	
...3 L402	AA27-10004F	COIL-CHOKE:-,56uH,K,-,2.5A,BK,-,DR12x15,L	
...3 L403	AA27-00025A	COIL-CHOKE:-,1MH,10%,,-,BK,-,12X20,14X25	
...3 L404	AA27-00015A	COIL-LINEARLITY:-,7.3uH,L81 DR15X18,-,BK,20%	
...3 L405	AA27-40003P	COIL-HORIZ,WIDTH:-,120uH/180uH,Th8x20,USTC 0.18	
L409	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
...4 L410	2701-001032	INDUCTOR-AXIAL:100uH,10%,5X14MM	
L802	2901-000299	FILTER-EMI ON BOARD:-,6A,UL/CSA,-,9x7.5,TP,-	
L803	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
L804	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
L805	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
L806	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
L807	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
L808	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
L809	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
L810	2701-001030	INDUCTOR-AXIAL:43uH,10%,5x14mm	
L811	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
L812	AA27-10002L	COIL-CHOKE:-,24UH,K,-,2A,-,24UH-K,10X10MM	
L813	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
L814	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	

Loc. No.	Code No.	Description ; Specification	Remark
L815	AA27-10002L	COIL-CHOKE:-,24UH,K,-,2A,-,24UH-K,10X10MM	
L817	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
L818	2701-001030	INDUCTOR-AXIAL:43uH,10%,5x14mm	
L822	2901-000299	FILTER-EMI ON BOARD:-,6A,UL/CSA,-,9x7.5,TP,-	
L823	2901-000299	FILTER-EMI ON BOARD:-,6A,UL/CSA,-,9x7.5,TP,-	
...3 LS401	AA27-10002V	COIL-CHOKE:-,6.3MH,K,-,500MA,-,NY632K(500	
...3 LX801S	AA29-30001Z	FILTER-LINE NOISE:-,10mH,2.8A,-,SQE3535	
...3 LX802S	AA29-30002D	FILTER-LINE NOISE:-,10mH,2.8A,-,SQE-3535H	
...3 NT801S	1404-001045	THERMISTOR-NTC:4.7OHM,15%,2900K,35.0MW,T	
...3 PC801S	0604-001038	PHOTO-COUPLER:TR,130-260%,200MW,DIP-4,ST	
...3 PC802S	0604-001038	PHOTO-COUPLER:TR,130-260%,200MW,DIP-4,ST	
...4 PCB	AA41-00157E	PCB-POWER:CS29A7HF,CEM-1,1LE,1.6T,330x1	
...3 PT801S	1404-001026	THERMISTOR-PTC:70HM,20%,,-,290V,25A,-,ST	
Q401	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
Q402	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
...3 Q403	0505-000156	FET-SILICON:IRF620,N,200V,5A,0.8ohm,50W,TO	
...3 Q404	0505-001116	FET-SILICON:BUZ73A,N,200V,22A,0.6ohm,40W,T	
...3 Q405	HA96-00310A	ASSY H/S:-,POWER,AA62-00062A,FMP-3FU +	
...4 Q405	0502-001175	TR-POWER:2SC5446,NPN,20000mW,TO-3PL,BK	
...4 Q405	HA60-020007	SCREW-TAPTITE:RH,+,2S,M3,L10,ZPC(YEL),SWRCH1	
...4 Q405	AA02-00007A	MICA:DPM-04,MICA,22x29x0.15mm	
...4 Q405	AA60-30001A	WASHER-PLATE:M3,ID3.5,15X8.5,T1.0,-,SBHG,-	
...4 Q405	AA62-00062A	HEAT SINK-PS:-,T2.0,SILVER,-,-,-,108*53	
...4 Q405	0205-000129	GREASE-SILICON:SC102,JAPAN	
...3 Q801	1004-000101	IC-ECC:SE-140N,DIP,-,ST,-,PLASTIC,1	
Q802	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1W,TO-92L,-,120-	
Q803	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1W,TO-92L,-,120-	
...4 QH01	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,TP,120-	
...3 QH04	0502-000442	TR-POWER:2SC4636RB,NPN,2W,TO-220,ST,10-	
R301	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R302	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R305	2001-001401	R-CARBON(S):30HM,5%,1/2W,AA,TP,2.4x6.4MM	
R306	2001-001163	R-CARBON(S):560OHM,5%,1/2W,AA,TP,2.4x6.4MM	
R307	2001-001144	R-CARBON(S):4.7KOHM,5%,1/2W,AA,TP,2.4x6.4MM	
...4 R309	2001-000016	R-CARBON(S):10HM,5%,1/2W,AA,TP,2.4x6.4MM	
R312	2004-004366	R-METAL(S):1.3Kohm,1%,1/2W,AA,TP,2.5x6.5mm	
R313	2001-001401	R-CARBON(S):30HM,5%,1/2W,AA,TP,2.4x6.4MM	
R314	2004-004366	R-METAL(S):1.3Kohm,1%,1/2W,AA,TP,2.5x6.5mm	
...4 R401	2008-001031	R-FUSIBLE(S):1.8OHM,5%,1W,AF,TP,3.9X10MM	
...4 R402	2001-001168	R-CARBON(S):6.8KOHM,5%,1/2W,AA,TP,2.4x6.4MM	
R403	2001-001108	R-CARBON(S):22KOHM,5%,1/2W,AA,TP,2.4x6.4MM	
R404	2001-001045	R-CARBON(S):1.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R405	2003-002101	R-METAL OXIDE:82ohm,5%,2W,AF,TP,4x12mm	
...4 R406	2001-001122	R-CARBON(S):3.9Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
...4 R407	2003-000746	R-METAL OXIDE(S):560HM,5%,2W,AF,TP,4X12MM	
...3 R408	2003-000394	R-METAL OXIDE(S):0.39ohm,5%,2W,AA,TP,4x12mm	
R410	2003-002101	R-METAL OXIDE:82ohm,5%,2W,AF,TP,4x12mm	
R411	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R412	2001-000052	R-CARBON(S):3.3Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
...4 R413	2001-001099	R-CARBON(S):2.7Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R414	2003-002130	R-METAL OXIDE(S):15ohm,5%,2W,AF,TP,3.9x10mm	
R415	2004-001390	R-METAL(S):1KOHM,2%,1/2W,AA,TP,2.4x6.4MM	
R416	2001-000052	R-CARBON(S):3.3Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R418	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4 R419S	2008-000264	R-FUSIBLE(S):10HM,5%,1W,AF,TP,3.9X10MM	
...4 R420	2001-001117	R-CARBON(S):2KOHM,5%,1/2W,AA,TP,2.4x6.4MM	
R421	2001-001106	R-CARBON(S):220Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R422	2001-001108	R-CARBON(S):22KOHM,5%,1/2W,AA,TP,2.4x6.4MM	
R423S	2008-001011	R-FUSIBLE(S):0.18ohm,10%,2W,AF,TP,3.9x10mm	
R424S	2008-001011	R-FUSIBLE(S):0.18ohm,10%,2W,AF,TP,3.9x10mm	
...3 R425S	2008-001019	R-FUSIBLE:0.20HM,10%,1/2W,AA,TP,2.5X6.5M	
...4 R426	2003-000540	R-METAL OXIDE(S):1KOHM,5%,2W,AF,TP,4X12MM	
R429	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4x6.4MM	
...3 R437S	2008-000282	R-FUSIBLE:0.47ohm,5%,1W,AA,TP,3.9x12mm	
R438	2001-000028	R-CARBON(S):100ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R439	2001-001178	R-CARBON(S):680ohm,5%,1/2W,AA,TP,2.4x6.4mm	
...4 R450	2008-001033	R-FUSIBLE(S):10ohm,5%,2W,AF,TP,3.9x10mm	
R451	2004-001390	R-METAL(S):1KOHM,2%,1/2W,AA,TP,2.4x6.4MM	
R453	2001-001045	R-CARBON(S):1.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R455	2003-002130	R-METAL OXIDE(S):15ohm,5%,2W,AF,TP,3.9x10mm	
R457	2001-001159	R-CARBON(S):510OHM,5%,1/2W,AA,TP,2.4x6.4MM	
R802	2001-001055	R-CARBON(S):1.8Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R804	2001-001159	R-CARBON(S):510OHM,5%,1/2W,AA,TP,2.4x6.4MM	
R805	2003-001093	R-METAL OXIDE(S):12KOHM,5%,2W,AF,TP,3.9X10MM	
R806	2003-001093	R-METAL OXIDE(S):12KOHM,5%,2W,AF,TP,3.9X10MM	
R807	2003-001093	R-METAL OXIDE(S):12KOHM,5%,2W,AF,TP,3.9X10MM	
R808	2001-001129	R-CARBON(S):330KOHM,5%,1/2W,AA,TP,2.4X6.4MM	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R809	2001-001129	R-CARBON(S):330KOHM,5%,1/2W,AA,TP,2.4X6.4M		C512	2301-001211	C-FILM,PPF:22nF,5%,400V,TP,20x7x14,7.5mm	
R809S	2008-001011	R-FUSIBLE(S):0.18ohm,10%,2W,AF,TP,3.9x10mm		C513	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP,5.5x3,5	
R810	2001-001178	R-CARBON(S):680ohm,5%,1/2W,AA,TP,2.4x6.4mm		C514	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP,5.5x3,5	
...4R812	2009-000017	R-METAL PLATE:0.1ohm,10%,5W,CL,TP,5x14x18mm		C515	2201-000599	C-CERAMIC,DISC:0.56nF,10%,500V,Y5P,TP,5.5x3,5	
R813	2001-001097	R-CARBON(S):2.4Kohm,5%,1/2W,AA,TP,2.4x6.4m		...3C520	2401-000703	C-AL:2200uF,20%,25V,GP,-,12.5x25mm,	
...4R814	2001-001170	R-CARBON(S):6.8ohm,5%,1/2W,AA,TP,2.4x6.4mm		...3C522	2201-000969	C-CERAMIC,DISC:10nF,+80-20%,3KV,Y5V,TP,-,10mm	
R815	2003-002206	R-METAL OXIDE(S):27Kohm,5%,3W,AG,TP,6x16mm		C528	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11.5,5	
R816	2003-002206	R-METAL OXIDE(S):27Kohm,5%,3W,AG,TP,6x16mm		...4C530	2201-000930	C-CERAMIC,DISC:0.22nF,10%,500V,Y5P,TP,5.5x3,5	
R817	2001-001144	R-CARBON(S):4.7KOHM,5%,1/2W,AA,TP,2.4X6.4M		...3C531	2401-002264	C-AL:10uF,20%,350V,GP,TP,10x20mm,5m	
R821	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3C532	2401-001525	C-AL:47uF,20%,250V,GP,BK,16x25mm,7.	
...4R823	2001-001112	R-CARBON(S):24KOHM,5%,1/2W,AA,TP,2.4X6.4MM		...4C533	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5X4.0X5.0MM,	
...4R824	2001-000085	R-CARBON(S):100Kohm,5%,1/2W,AA,TP,2.4x6.4m		...4C534	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11.5,5	
R825	2001-001106	R-CARBON(S):220Kohm,5%,1/2W,AA,TP,2.4x6.4m		...4C535	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11.5	
R826	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm		...4CF01	2201-000180	C-CERAMIC,DISC:10NF,10%,50V,Y5V,TP,6.5*3	
R827	2001-001097	R-CARBON(S):2.4Kohm,5%,1/2W,AA,TP,2.4x6.4m		...4CF02	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x4,5mm	
...4R830	2001-001072	R-CARBON(S):R-CARBON(S):12ohm,5%,1/2W,AA,T		CF03	2201-000192	C-CERAMIC,DISC:0.01nF,0.25pF,500V,NP0,TP,5x4,	
R831	2001-000028	R-CARBON(S):100ohm,5%,1/2W,AA,TP,2.4x6.4mm		...4CF04	2201-000516	C-CERAMIC,DISC:4.7nF,+100-0%,500V,Y5U,TP,11x4	
R832	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm		...4CF05	2301-000261	C-FILM,PEF:4.7nF,5%,100V,TP,10.5x12.5x6.5	
...4R833	2001-001070	R-CARBON(S):120ohm,5%,1/2W,AA,TP,2.4x6.4mm		CF06	2201-000192	C-CERAMIC,DISC:0.01nF,0.25pF,500V,NP0,TP,5x4,	
...4R834	2003-001090	R-METAL OXIDE(S):10Kohm,5%,2W,AF,TP,4x12mm		...4CF07	2201-000604	C-CERAMIC,DISC:0.056nF,+100-0%,500V,SL,TP,6x3	
R835	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		CF71	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11.5,5	
...4R836	2008-001050	R-FUSIBLE:22ohm,5%,2W,AF,TP,3.9x10mm		CF72	2401-002009	C-AL:100UF,20%,16V,GP,TP,6.3*7.5	
...4RH01	2001-000008	R-CARBON:15KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3CF73	2401-001157	C-AL:33uF,20%,160V,GP,TP,13x21.5	
...4RH02	2001-000812	R-CARBON:5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M		CF74	2401-002009	C-AL:100UF,20%,16V,GP,TP,6.3*7.5	
...4RH03	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M		...4CF75	2401-000045	C-AL:10UF,20%,160V,GP,TP,10*16.5	
...4RH04	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3CNC01	3711-003641	CONNECTOR-HEADER:BOX,12P,1R,2.5mm,STRAIGHT,SN	
...4RH05	2001-000490	R-CARBON:200OHM,5%,1/8W,AA,TP,1.8X3.2MM		...3CNC01	AA39-20032G	LEAD CONNECTOR-ASSY,12P,67096-012,S,500MM,1007#2	
RH06	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3CNC02	3711-002641	CONNECTOR-HEADER:BOX,10P,1R,2.54MM,STRAIGHT,SN	
RH07	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...3CNC02	AA39-20025E	LEAD CONNECTOR-ASSY,10P,67096-010,S,400,1007#26	
...4RH08	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM		D501	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
...4RH09	2001-001165	R-CARBON(S):560HM,5%,1/2W,AA,TP,2.4X6.4MM		D502	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...4RH10	2001-000411	R-CARBON:18KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4D504	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
RH11	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		D505	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
RH12	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		D506	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
...4RH14	2001-001143	R-CARBON(S):4.3Kohm,5%,1/2W,AA,TP,2.4x6.4m		D509	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...4RH15	2001-001078	R-CARBON(S):15Kohm,5%,1/2W,AA,TP,2.4x6.4mm		D510	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
RH16	2001-001163	R-CARBON(S):560OHM,5%,1/2W,AA,TP,2.4X6.4MM		D511	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...4RH17	2001-000109	R-CARBON(S):470OHM,5%,1/2W,AA,TP,2.4X6.4MM		D512	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
RH18	2001-001055	R-CARBON(S):1.8Kohm,5%,1/2W,AA,TP,2.4x6.4m		D513	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...4RH19	2003-002212	R-METAL OXIDE(S):75Kohm,5%,2W,AF,TP,3.9X10mm		D514	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
RH20	2003-002211	R-METAL OXIDE(S):91Kohm,5%,2W,AG,TP,3.9x12mm		DF01	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
RH21	2003-002211	R-METAL OXIDE(S):91Kohm,5%,2W,AG,TP,3.9x12mm		DF02	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
...4RH22	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		DF05	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
...4RH23	2001-001107	R-CARBON(S):220ohm,5%,1/2W,AA,TP,2.4x6.4mm		DF06	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,TP	
RH24	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		DF07	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...3RL801S	3501-001040	RELAY-POWER:12VDC,500mW,10A,1FORMA,15mS,5m		DF08	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,TP	
...3RL802S	3501-001053	RELAY-POWER:5VDC,530MW,10A,1FORMA,15MS,5MS		DZ501	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500MW,DO-	
RS01	2006-000323	R-CEMENT:56ohm,5%,5W,CB,TP,9.5x13.5x26.		DZ502	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500MW,DO-	
RS02	2006-000323	R-CEMENT:56ohm,5%,5W,CB,TP,9.5x13.5x26.		DZ503	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500MW,DO-	
RS03	2003-001038	R-METAL OXIDE(S):R-METAL OXIDE(S):4.7ohm,5%,2W,		...4DZ504	0403-001324	DIODE-ZENER:MTZJ13A,12.11-12.75V,500mW,DO-	
RS04	2003-001038	R-METAL OXIDE(S):R-METAL OXIDE(S):4.7ohm,5%,2W,		...4DZ510	0403-000698	DIODE-ZENER:TZP12A,12V,11.4-12.6V,1W,DO-41	
...4RX801S	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7x9mm		...3FN1	3711-002643	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGHT,SN	
...4RY801S	2002-001012	R-COMPOSITION:8.2Mohm,10%,1/2W,AA,TP,3.7x9mm		...3FV1	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5MM,STRAIGHT,SN	
...3SWS01	3409-000138	SWITCH-LEVER:SWITCH-LEVER:30V,200mA,SP3T,NO		...3FV1	AA39-20033C	LEAD CONNECTOR-ASSY,3(2)P,67096-003,S,200,1185#26	
...3T401	AA26-50001S	TRANS-HORIZ.DRIVE:-,-,-,6.0mH,-,-,44uH,-,-,-,-		...3GT504	AA39-20010D	LEAD CONNECTOR-ASSY,1P,YFH800-01,S,400,1617#22	
...3T402	AA26-90002C	TRANS-DUMMY:-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-		IC501	HA96-50151B	ASSY-H/S,-,AMP,AA61-10060A,TA6111Q,-	
...3T444S	AA26-00082A	TRANS FBT,FUJ,-29C002F(S),CT29A7DR,1.95mH		...4IC501	1201-001131	IC-VIDEO AMP:6111,SIP,9P,-,SINGLE,-,PLASTIC	
...3T801S	AA26-00056A	TRANS SWITCHING:-,-,-,AC90~260V,DC135V/26V/12V		IC502	HA96-50151B	ASSY-H/S,-,AMP,AA61-10060A,TA6111Q,-	
...3TS801S	AA26-00055A	TRANS SWITCHING:-,-,-,AC80~280V,-,-,-,4mH,ST,-		IC502	1201-001131	IC-VIDEO AMP:6111,SIP,9P,-,SINGLE,-,PLASTIC	
VP801S	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP		IC503	HA96-50151B	ASSY-H/S,-,AMP,AA61-10060A,TA6111Q,-	
VX801S	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP		IC503	1201-001131	IC-VIDEO AMP:6111,SIP,9P,-,SINGLE,-,PLASTIC	
ASSY-PCB,CRT				...4IC503	HA60-020005	SCREW-MACHINE:RH,+M3,L6,ZPC(BLK),SWRCH18A,F	
..2 *	HA95-00752A	ASSY-PCB,CRT:32W6,KS4A		...4IC503	6021-000154	NUT-HEXAGON:2C,M3,ZPC(YEL),SM20C	
...4C501	2201-000949	C-CERAMIC,DISC:0.005nF,0.5pF,50V,UJ,TP,4x3.5,		...4IC503	AA61-10060A	BRACKET-TR:W3220,CUS-1 1/2H,T0.5,-,-,-,-	
...4C502	2201-000436	C-CERAMIC,DISC:0.002nF,0.25pF,50V,SL,TP,4x3.5		...3IC504	HA96-00110D	ASSY-H/S,-,-,AA62-30013K,TA2030,-	
C503	2301-001211	C-FILM,PPF:22nF,5%,400V,TP,20x7x14,7.5mm		...4IC504	1201-000010	IC-OP AMP:2030,PENTAWATT,5P,-,SINGLE,-,C	
C504	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm,		...4IC504	HA60-020007	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SWRCH1	
C505	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm,		...4IC504	AA62-30013K	HEAT SINK-ES:-,-,-,-,44/18,-,WHT,A6063 EXTR	
C506	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm,		L502	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
C507	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm,		LF01	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
C509	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm,		LF02	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
C510	2301-001211	C-FILM,PPF:22nF,5%,400V,TP,20x7x14,7.5mm		...4LF03	2701-000112	INDUCTOR-AXIAL:100uH,10%,3x7mm	
C511	2301-001211	C-FILM,PPF:22nF,5%,400V,TP,20x7x14,7.5mm		LF04	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G	
				LF06	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
				LF08	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
				LF09	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	
				LF11	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-	



Loc. No.	Code No.	Description ; Specification	Remark
...4PCB	AA41-00209C	PCB-CRT:CT-29A7DR,FR-1,1L,C,1.6T,330x2	
Q501	0501-000294	TR-SMALL SIGNAL:KSA708-Y,PNP,800mW,TO-92,TP,12	
Q502	0501-000294	TR-SMALL SIGNAL:KSA708-Y,PNP,800mW,TO-92,TP,12	
Q503	0501-000294	TR-SMALL SIGNAL:KSA708-Y,PNP,800mW,TO-92,TP,12	
QF01	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
QF02	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
QF03	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
...4QF04	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,TP,120-	
QF05	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
...3QF09	HA96-00111B	ASSY-H/S/-,TR,AA62-30013L,2SA1011,-	
...4QF09	0502-000131	TR-POWER:2SA1011-D,PNP,1.2W,TO-220,-,60	
...4QF09	6003-000335	SCREW-TAPTITE:RH,+,2S,M3,L8,ZPC(YEL),SWRCH18	
...4QF09	AA62-30013L	HEATSINK-ES:-,-,-,44/22,-,WHT,-,-,-,-	
...3QF10	HA96-00111A	AASSY-H/S/-,AA62-30013L,2SC2344,-	
...4QF10	0502-000153	TR-POWER:2SC2344-D,NPN,1.2W,TO-220,-,60	
...4QF10	6003-000335	SCREW-TAPTITE:RH,+,2S,M3,L8,ZPC(YEL),SWRCH18	
...4QF10	AA62-30013L	HEATSINK-ES:-,-,-,44/22,-,WHT,-,-,-,-	
R501	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R502	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R503	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R504	2001-001045	R-CARBON(S):1.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R505	2001-001045	R-CARBON(S):1.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R506	2001-001045	R-CARBON(S):1.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
...4R507	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4R508	2001-000995	R-CARBON:820OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R510	2001-001194	R-CARBON(S):82Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R511	2001-001194	R-CARBON(S):82Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R512	2001-001194	R-CARBON(S):82Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R513	2002-001008	R-COMPOSITION:1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R514	2002-001008	R-COMPOSITION:1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
R515	2002-001008	R-COMPOSITION:1.8Kohm,5%,1/2W,AA,TP,3.7x9mm	
...4R518	2001-001095	R-CARBON(S):2.2MOHM,5%,1/2W,AA,TP,2.4X6.4MM	
R519	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R520	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R521	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4R525	2002-001006	R-COMPOSITION:4.7KOHM,10%,1/2W,AA,TP,3.7X9MM	
...4R528	2008-000252	R-FUSIBLE(S):0.47ohm,10%,1/2W,AF,TP,2.5x	
R540	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R556	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R557	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R558	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4R560	2001-001049	R-CARBON(S):1.3Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
...4R561	2001-001126	R-CARBON(S):300ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R562	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R563	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4R564	2001-000977	R-CARBON:8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
...4R565	2004-001379	R-METAL(S):12Kohm,1%,1/2W,AA,TP,2.4x6.4mm	
...4R566	2001-001040	R-CARBON(S):0.68OHM,5%,1/2W,AA,TP,2.4X6.4MM	
RF02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4RF03	2001-000362	R-CARBON:150OHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4RF04	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4RF17	2001-000019	R-CARBON(S):10ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RF18	2001-000022	R-CARBON(S):33ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RF19	2001-000022	R-CARBON(S):33ohm,5%,1/2W,AA,TP,2.4x6.4mm	
...4RF20	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4RF21	2001-000258	R-CARBON:1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF22	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4RF23	2001-000554	R-CARBON:270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
RF24	2003-001018	R-METAL OXIDE(S):220ohm,5%,2W,AF,TP,3.9x10mm	
RF25	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF26	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
RF27	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
RF28	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4RF29	2001-001071	R-CARBON(S):12KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
RF30	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF31	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RF32	2003-000746	R-METAL OXIDE(S):56OHM,5%,2W,AF,TP,4X12MM	
RF33	2001-001100	R-CARBON(S):2.7ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RF34	2001-001100	R-CARBON(S):2.7ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RF35	2003-000746	R-METAL OXIDE(S):56OHM,5%,2W,AF,TP,4X12MM	
RF36	2003-001018	R-METAL OXIDE(S):220ohm,5%,2W,AF,TP,3.9x10mm	
...3V999S	3704-001111	SOCKET-CRT:8P,15.24PI,35.5PI,NL,-	

Loc. No.	Code No.	Description ; Specification	Remark
ASSY-PCB,CONTROL			
..2 *	HA95-900036	ASSY-PCB,CONTROL:32W6,KS4A	
C701	2202-000263	C-CERAMIC,MLC-AXIAL:470pF,10%,50V,Y5P,TP,3.5x19,-	
C702	2202-000263	C-CERAMIC,MLC-AXIAL:470pF,10%,50V,Y5P,TP,3.5x19,-	
C703	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-	
C704	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-	
C705	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-	
C706	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-	
C707	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C708	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
...4CC01	2401-001495	C-AL:47uF,20%,16V,GP5x11mm,5mm,TP	
...3CN802A	AA39-20179F	LEAD CONNECTOR-ASSY:,3(2)P,YFH800-150,S,400MM,1617	
...3CNC01	AA39-20112E	LEAD CONNECTOR-ASSY:,9P,YBNH025-09,67096-009,300,1	
...3CNC02	AA39-20159D	LEAD CONNECTOR-ASSY:,12P,YBNH025-12,67096-12,300M	
...4DC01	0403-000718	DIODE-ZENER:MTZJ6.8B,6.8V,6.49-6.83V,500mW	
...3JA701	3722-001031	JACK-RCA:3P,3.6MM,#18,AU	
...3JA702	3722-001163	JACK-VHS:4P,12mm,AU,BLK,N	
...3JHK01	3722-000143	JACK-PHONE:1P(VER),3.4mm,AG,BLK,NO	
L701	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-,TP,HF30	
L702	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-,TP,HF30	
L703	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-,TP,HF30	
L704	3301-001223	CORE-FERRITE BEAD:AA,62ohm,3.5x0.8x5mm,-,TP,HF30	
...3LD01	AA96-30006A	ASSY-LED,GUIDE:-,-,SL255D,RED/GRN	
...4PCB	AA41-00388A	PCB-CONTROL:WS32W6,FR-1,1L,A,1.6T,330x245,	
R701	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R702	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4R703	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R704	2001-000947	R-CARBON:7.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4R705	2001-000490	R-CARBON:200OHM,5%,1/8W,AA,TP,1.8X3.2MM	
...4RC01	2001-001108	R-CARBON(S):22KOHM,5%,1/2W,AA,TP,2.4X6.4MM	
...4RC02	2001-000020	R-CARBON(S):22ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RC03	2001-001114	R-CARBON(S):270ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RC04	2001-001114	R-CARBON(S):270ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RC05	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
RC06	2001-000947	R-CARBON:7.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...4RC07	2001-000387	R-CARBON:16Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RC08	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
...3RMC01	AA59-60001U	MODULE-REMOCON:-,ORC-50VF/SR-12V,38KHz,940nm,	
...3SW811S	3403-000179	SWITCH-PUSH:250V,5A,DPST,-,JPW-2104B	
SWC01	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
SWC02	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
SWC03	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
SWC04	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
SWC05	3404-000244	SWITCH-TACT:15V,20mA,90-170gf,7.5x7mm,SPST	
ASSY-PCB,DOLBY JACK			
..2 *	HA95-00615A	ASSY-PCB,DOLBY JACK:32W6,KS4A	
C701	2202-000145	C-CERAMIC,MLC-AXIAL:,12NF,10%,50V,Y5P,TP,3.5X1.9MM	
C702	2202-000145	C-CERAMIC,MLC-AXIAL:,12NF,10%,50V,Y5P,TP,3.5X1.9MM	
...3CN701A	AA39-20055B	LEAD CONNECTOR-ASSY:,6P,YBNH025-06,67096-006,300,1	
...3CN702A	AA39-20069D	LEAD CONNECTOR-ASSY:,5P,YBNH025-05,67096-005,300,1	
...3JA701A	AA63-40258A	TERMINAL-SPEAKER:4P,ABS,4,-,-,-,BLK	
...3JA702A	3716-000229	TERMINAL-BLOCK:-,2P,13mm,-,-	
...3JA703A	3722-001439	JACK-RCA:2P,3.5mm,NI,BLK,-	
L701	2701-001040	INDUCTOR-AXIAL:10uH,10%,4.5x14mm	
L702	2701-001040	INDUCTOR-AXIAL:10uH,10%,4.5x14mm	
L703	2701-001040	INDUCTOR-AXIAL:10uH,10%,4.5x14mm	
L704	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
L705	2701-000115	INDUCTOR-AXIAL:10uH,10%,3x7mm	
...4PCB	AA41-00167B	PCB-DOLBY JACK:WS32W8HD,FR-1,1L,B,1.6T,245x24	
R701	2001-000028	R-CARBON(S):100ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R702	2001-000028	R-CARBON(S):100ohm,5%,1/2W,AA,TP,2.4x6.4mm	

REMOCON

0.1 *	AA59-00143A	REMOCON:-,TM63,DREAM4,53,L,GRAY,TTX,E/	
ASSY-ACCESSORY			
0.1 *	HA94-01597D	ASSY-ACCESSORY:KS4A,XEC	

Loc. No.	Code No.	Description ; Specification	Remark
.2	HA68-00336B	CARD-WARRANTY-A/P100(G),A5,NEW VERSION,INT-H	
.2	HA68-00971A	LABEL-BACK,DOLBY-A/P100(G),SILVER-BLACK	
.2	4301-000121	BATTERY-MN-1.5V,-,AAA,10.5x44.5m,HOLDER	
.2	HA69-00276A	VINYL-BAG:HDPE,TO.025,L400,W240,-,W/O LO	
.2	HA68-00938A	MANUAL-USERS:KS4A,W/P,100(G),ENG,	
.2	HA68-100110	MANUAL-USERS:KS4A,W/P,100(G),NOR,SWE,	
.2	HA68-100108	MANUAL-USERS:KS4A,W/P,100(G),FINN,DAN	
.2	HA68-500048	LABEL-XRAY-A/P 120(G),COMMON WARRANTY STI	
.2	HA68-50502A	LABEL-BOX-A/P (120G),TO.1.L210,W150,WHT,	
.2	HA68-100123	MANUAL-USERS:KS4A,W/P,100(G),HUN	
.2	HA68-100112	MANUAL-USERS:KS4A,ITALY	
.2	HA68-00894A	SCHEMATIC-DIAGRAM:XET,KS4A	
.2	HA68-100114	MANUAL-USERS:KS4A,W/P,100(G),GER,FRA,DUT	
.2	HA68-100122	MANUAL-USERS:KS4A,W/P,100(G),SPA,POR	

**ASSY-POWER,CORD**

0.1\* AA96-00094A ASSY-POWER, CORD: DP, CP2/NO(4.0), H/C350MM, KJP140

## ASSY HOLDER SPK

0.1\* AA91-00415A ASSY HOLDER SPK:-----WF(130x70)+TW(50mm).WS

## ASSY-CRT

0.1 \* HA94-01800A ASSY-CRT;W76EGX023X522,+360MG,32,ITC,T  
 .2 AA03-00122A CRT-COLOR;- ,W76EGX023X522,100HZ,+380MG,3  
 .2 AA39-20519A LEAD CONNECTOR-ASSY;6(4P);YFH806-06,500MM,1617#22  
 .2 AA27-00019A COIL-DEGAUSSING;- 32.14.50HM,65T,13800E

## ASSY-PCB,PFC

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.2 * HA95-00766A ASSY-PCB, PFC:-, WS32W8HD, KS4A, PAL,-,-
CH+C HA60-020006 SCREW-TAPTITE:RWH,+B,M3,L10,ZPC(YEL)SWRCH1
CH+HC HA60-020006 SCREW-TAPTITE:RWH,+B,M3,L10,ZPC(YEL)SWRCH1
CH+PCB HA60-020006 SCREW-TAPTITE:RWH,+B,M3,L10,ZPC(YEL)SWRCH1
CH+PFC HA60-020006 SCREW-TAPTITE:RWH,+B,M3,L10,ZPC(YEL)SWRCH1
DCN01 AA27-00044A COIL-CHOKE:-,8/7,1.3mH,-,-,1.7A,BK,HCA117
DCN02 AA27-00044A COIL-CHOKE:-,8/7,1.3mH,-,-,1.7A,BK,HCA117
...3 DCN801 AA39-20041B LEAD CONNECTOR-ASSY;2PYHF800-02,5,300,1617#22
...4 PCB AA41-00282B PCB-PFC-WS32WHD,CEM-1,1L,B,1,6,T,245X24
TB+HC HA60-020008 SCREW-TAPTITE:RWH,+B,M4,L12,ZPC(YEL),SWRCH1
TB+PCB HA60-020008 SCREW-TAPTITE:RWH,+B,M4,L12,ZPC(YEL),SWRCH1
.2 TB+SCR HA60-020003 SCREW-TAPPING:RH,+2,M4,L15,ZPC(BLK),SWRCH18
.2 AA61-00107A HOLDER-CHASSIS:DP,32W6,-,-,-,AA61-20271A
.2 AA61-00070A HOLDER-CONTROL:DP,28W6,-,-,-,AA61-00002A
.2 HA60-020006 SCREW-TAPTITE:RWH,+B,M3,L10,ZPC(YEL)SWRCH1
.2 AA64-00098B INLAY BACK:29A7,PS SHEET,TO,5,-,BLK,D4,
.2 AA63-00165B TERMINAL-BOARD,ANT:29A6,HIPS VO BLK,-,-,-,D4
.2 AA39-20010F LEAD CONNECTOR-ASSY;1PYHF800-01,5,700,1617#22
.2 AA65-300118A CLAMP-WIRE:DONG-A,NYLON66,-,-,-,DATL-600
.2 HA60-020008 SCREW-TAPTITE:RWH,+B,M4,L12,ZPC(YEL),SWRCH1
.2 AA65-30110A CLAMP-WIRE:ALL MODEL,NYLON 66,V2,-,BLK,PA
.2 AA65-30009A CLAMP-FBT:ABS,VO,BLK,-,-,-
.2 AA65-30105C CLAMP-WIRE:ALL MODEL,NYLON 66,V2,-,NTR,5M

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**ASSY-CABINET,FRONT**

0.1 *	HA91-20025A ASSY-CABINET,FRONT:32W6H,D4,SILVER
.2	AA61-60005K SPRING-CS;-,-,SUS304,-,-,OD12.2,N4,OD12.2,
.2	AA64-00002A WINDOW-REMOCON;-,-,28W6,-,PC,V0,LG41338,-
.2	AA64-70117B BADGE-BRAND;-,-,AL,-,-,L65,R2000,SILVER,SS
.2	AA64-00191A INDICATOR-LED;-,-,28C7,-,ACRYL,-,CLR,-
.2	AA61-30001A CATCH-DOOR;-,-,KIFUCO LA701,-
.2	AA64-00008B INLAY-PCMCIA:28W6,PS SHEET ,T0.3,-,-,BLK,S5
.2	AA64-00007B INLAY-CONTROL:32W6,PS SHEET,T0.3,-,-,BLK,SCT
KC+CF	HA60-020003 SCREW-TAPPING;RH,+2,M4,L15,ZPC(BLK),SWRCH18
IMD+CF	HA60-020003 SCREW-TAPPING;RH,+2,M4,L15,ZPC(BLK),SWRCH18
.2	HA64-24016A KNOB-CONTROL:28C7,HIPS,HB,GRAY

Loc. No.	Code No.	Description ; Specification	Remark
..2	HA64-25013A	KNOB-POWER;28W6,HIPS,SV-012P-II,SILVER	
..3	HA64-26013A	KNOB-POWER;28W6,HIPS,HB,GRAY	
..2	HA64-27019A	DOOR-CONTROL;28W6,HIPS,HB,SV-012P-II	
..3	HA64-28019A	DOOR-CONTROL;28W6,HIPS,HB,GRAY	
..2	HA64-20025A	CABINET,FRONT;32W6H,HIPS,HB,SV-012P-II,	
..3	HA64-21023A	CABINET,FRONT;32W6,HIPS,HB, GREY	

## ASSY-CABINET(COM)

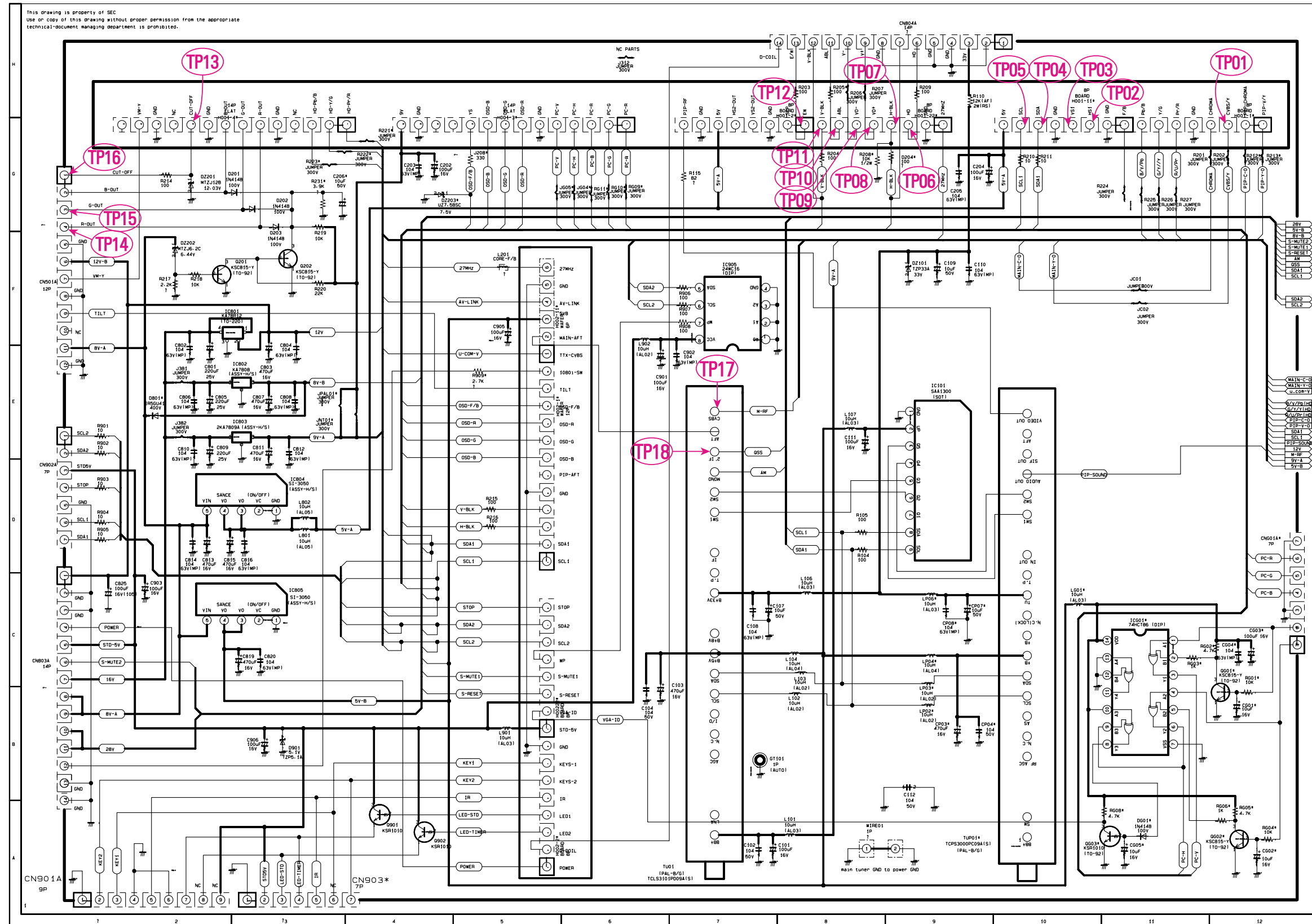
0.1 *	HA90-20025AASSY-CABINET(COM);32W6,KS4A
.2	HA64-22023ACABINET-BACK;32W6,HIPS,HB,GRAY
.2	AA65-301134CLAMP-D,COIL,NYLON 66,V2,BLK,TVI 25-29,-,-
.2	AA65-30008ACLAMP-CORD;PE,HB,BLK,-,-,-
.2 CRT+CF	HA60-020012 SCREW-ASSY;WC,HH,-,M5,L30,SWRCH18A,ZPC
CB+CF	HA60-020011 SCREW-TAPTITE;RH,M4,L20,BLK
CB+TB	HA60-020011 SCREW-TAPTITE;RH,M4,L20,BLK
.2	HA68-500025 LABEL-RATING;A/P 90G,T0.2,L55,W55,STANDARD
.2 SPK+CF	HA60-10050A SCREW-ASSY;WP,RH,-,M4,L25,SWRCH18A,-,ZPC
.2	HA68-500021 LABEL-QMS;-T0.1,L135,W35,WHT,-,-
.2	AA65-300118ACLAMP-WIRE-DONG,A,NYLON 66,-,-,-,DATL-600

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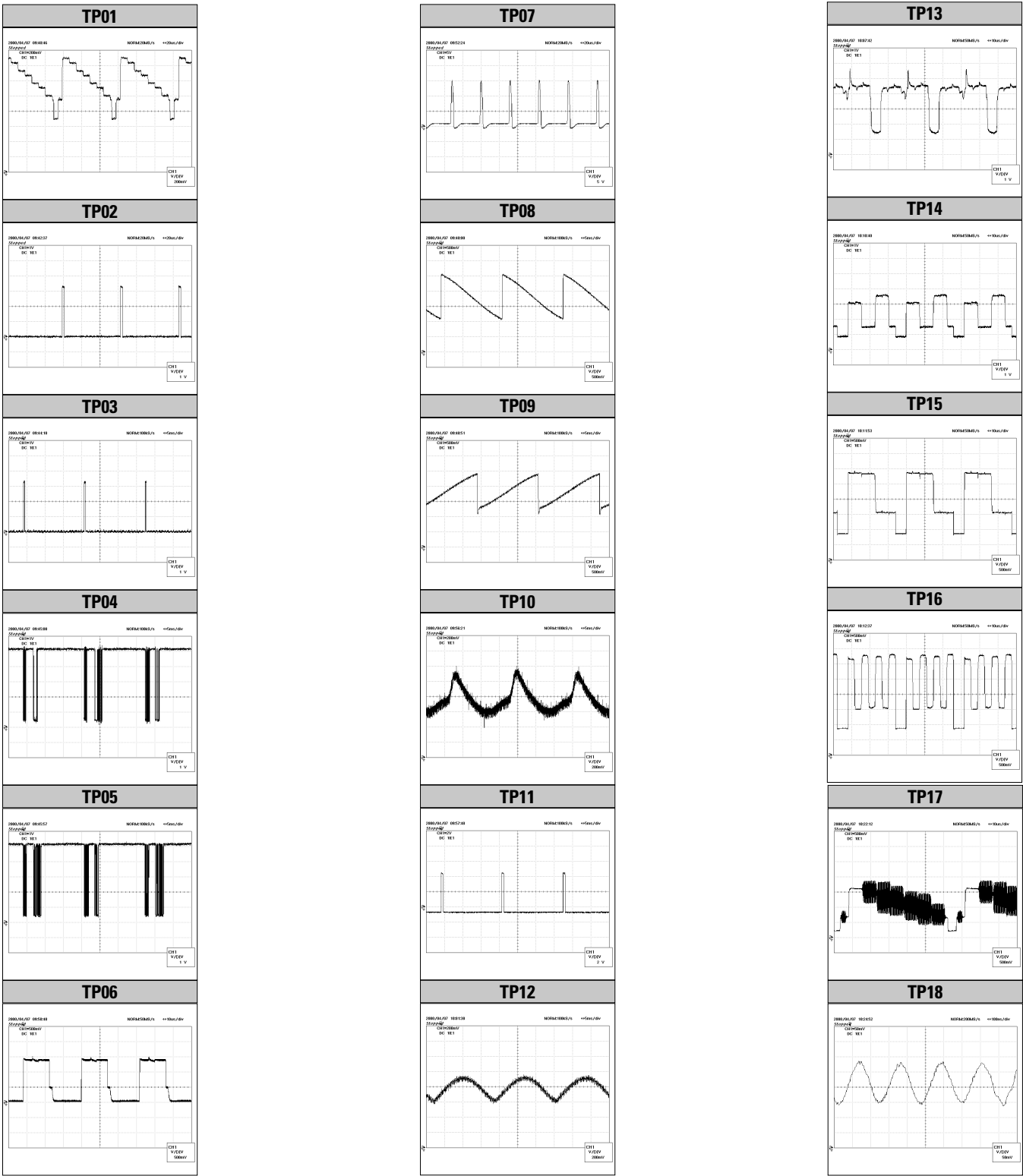
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## 8. Schematic Diagrams

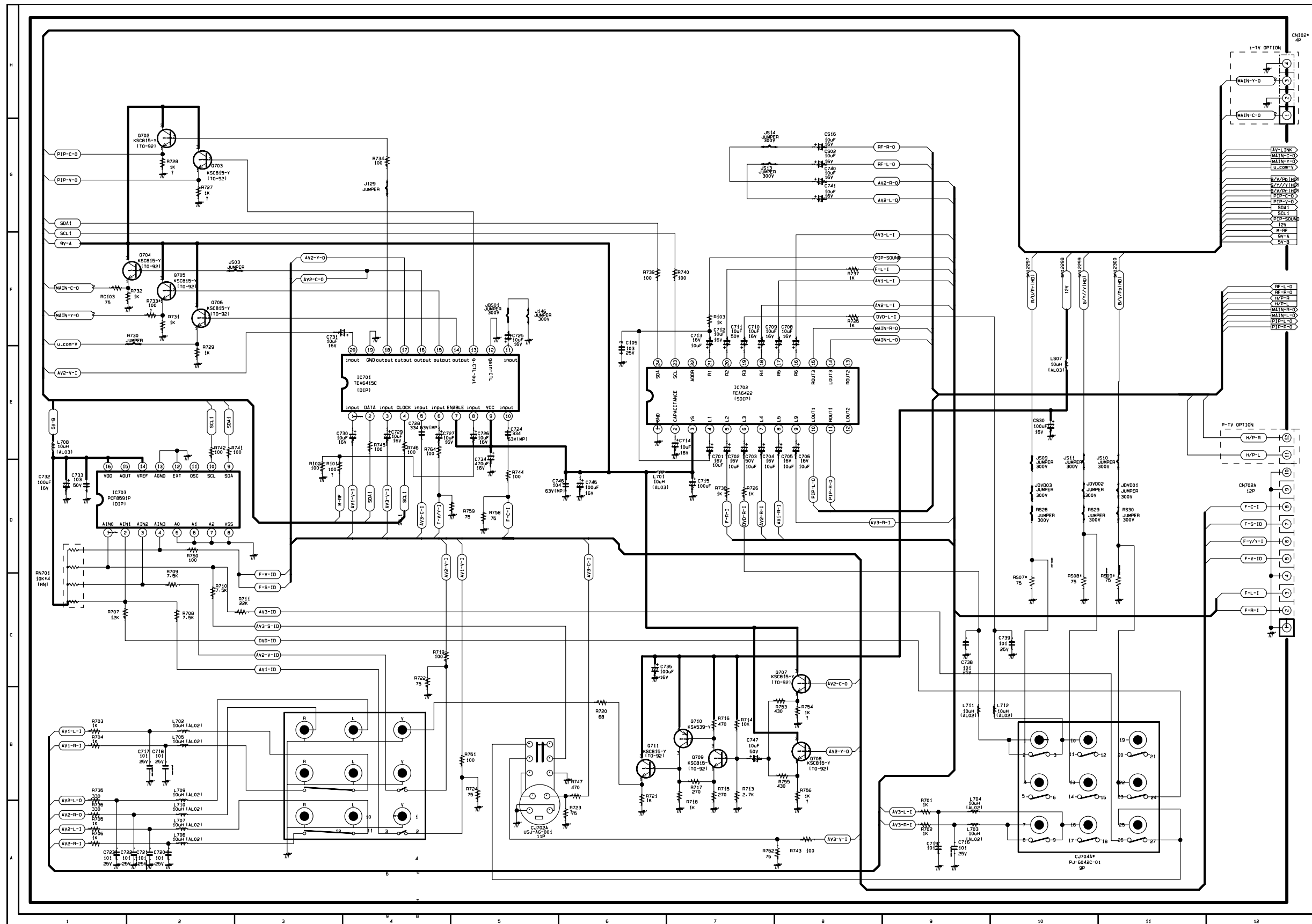
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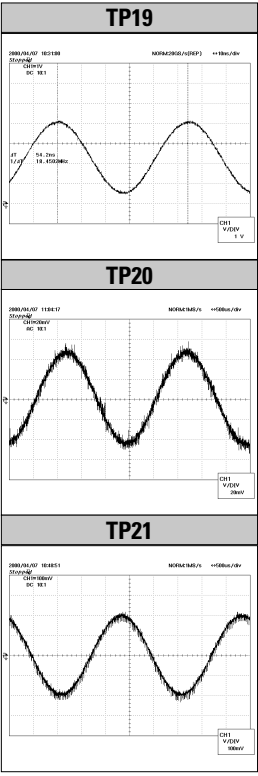
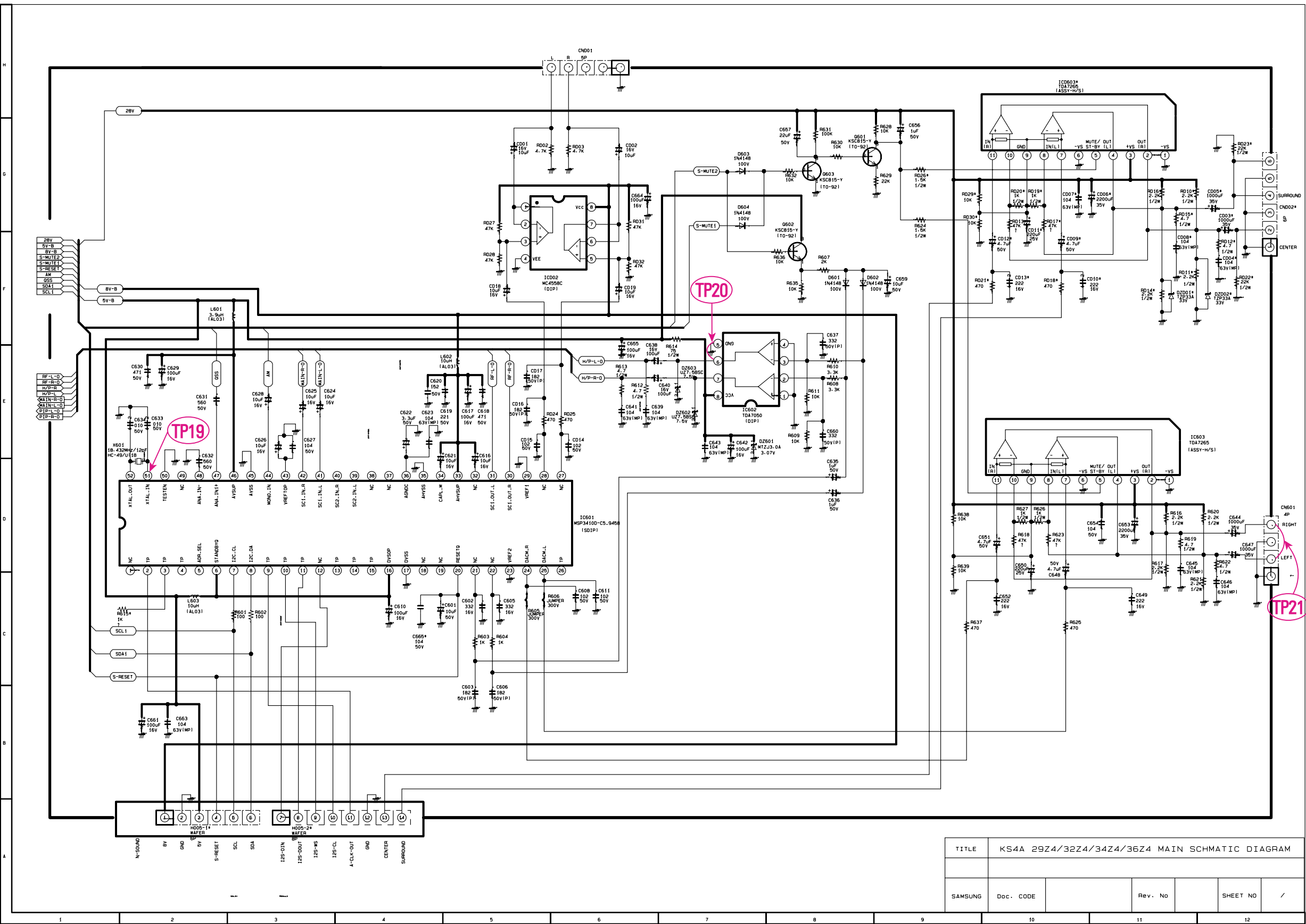
8-1-1 MAIN\_RCA(1/3) WAVEFORMS



## 8-2 MAIN\_RCA(2/3)



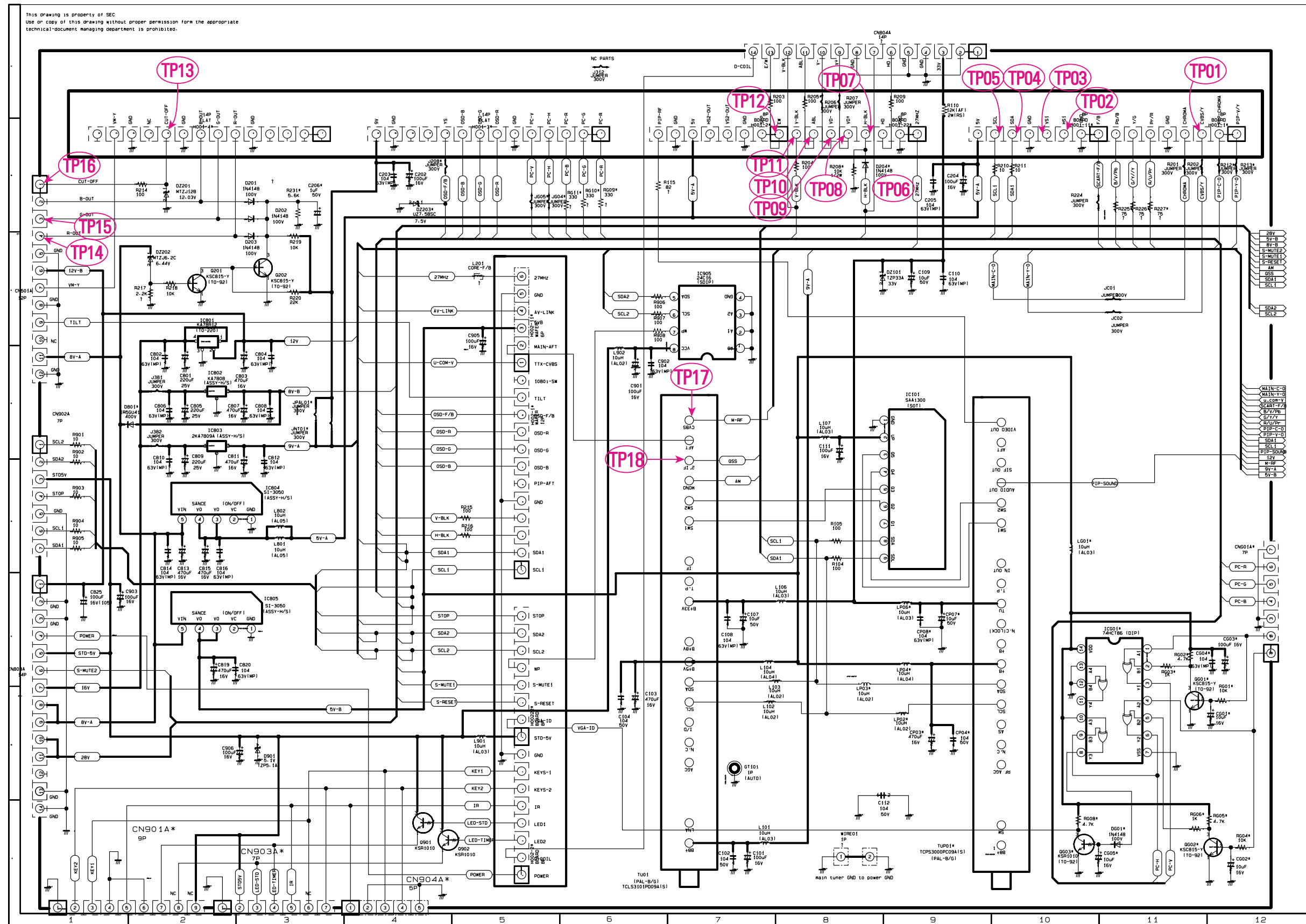
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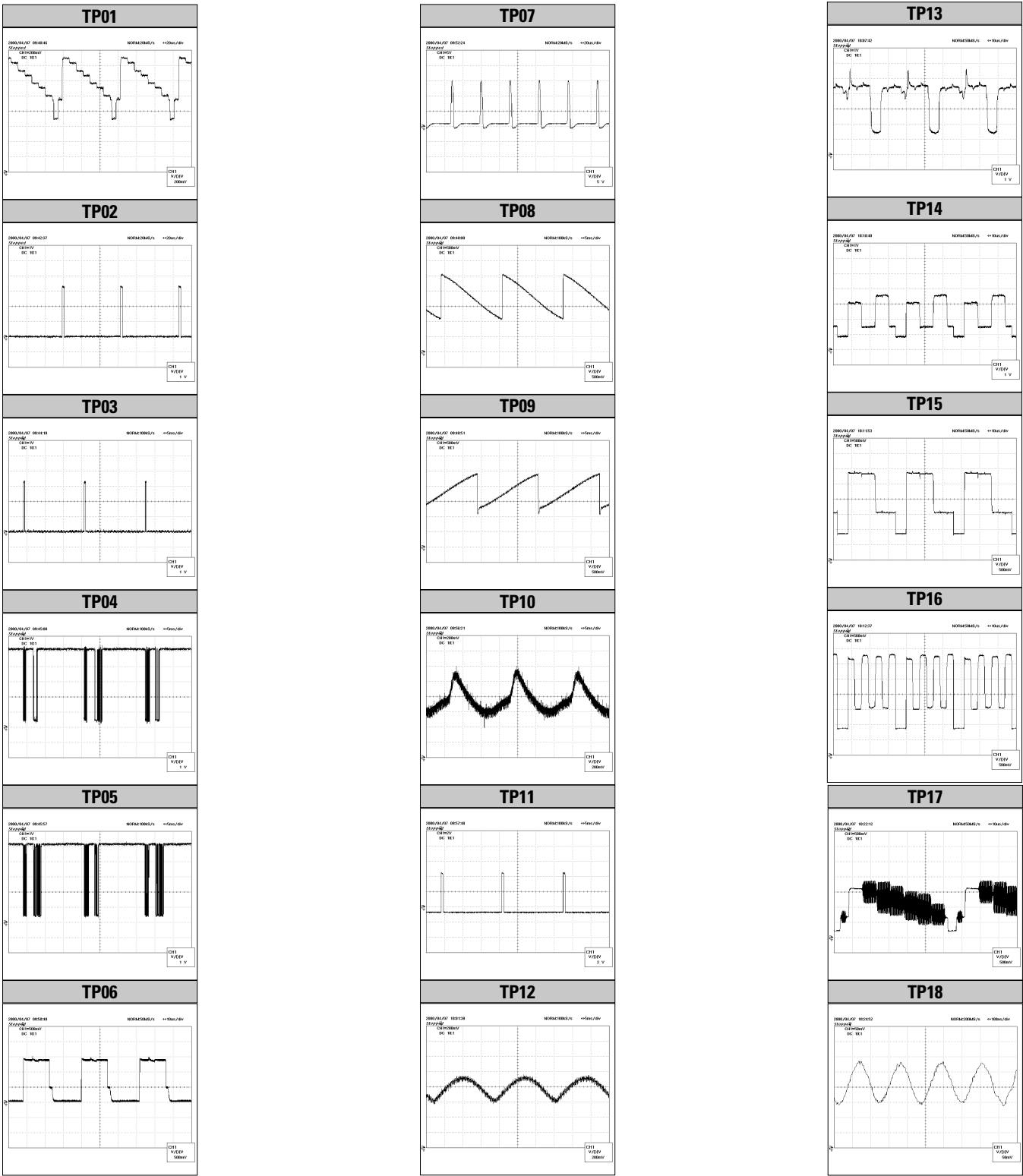
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SAMSUNG		Doc. CODE		Rev. No		SHEET NO	/				



## 8-4 MAIN\_SCART(1/3)



8-4-1 MAIN\_SCART(1/3) WAVEFORMS



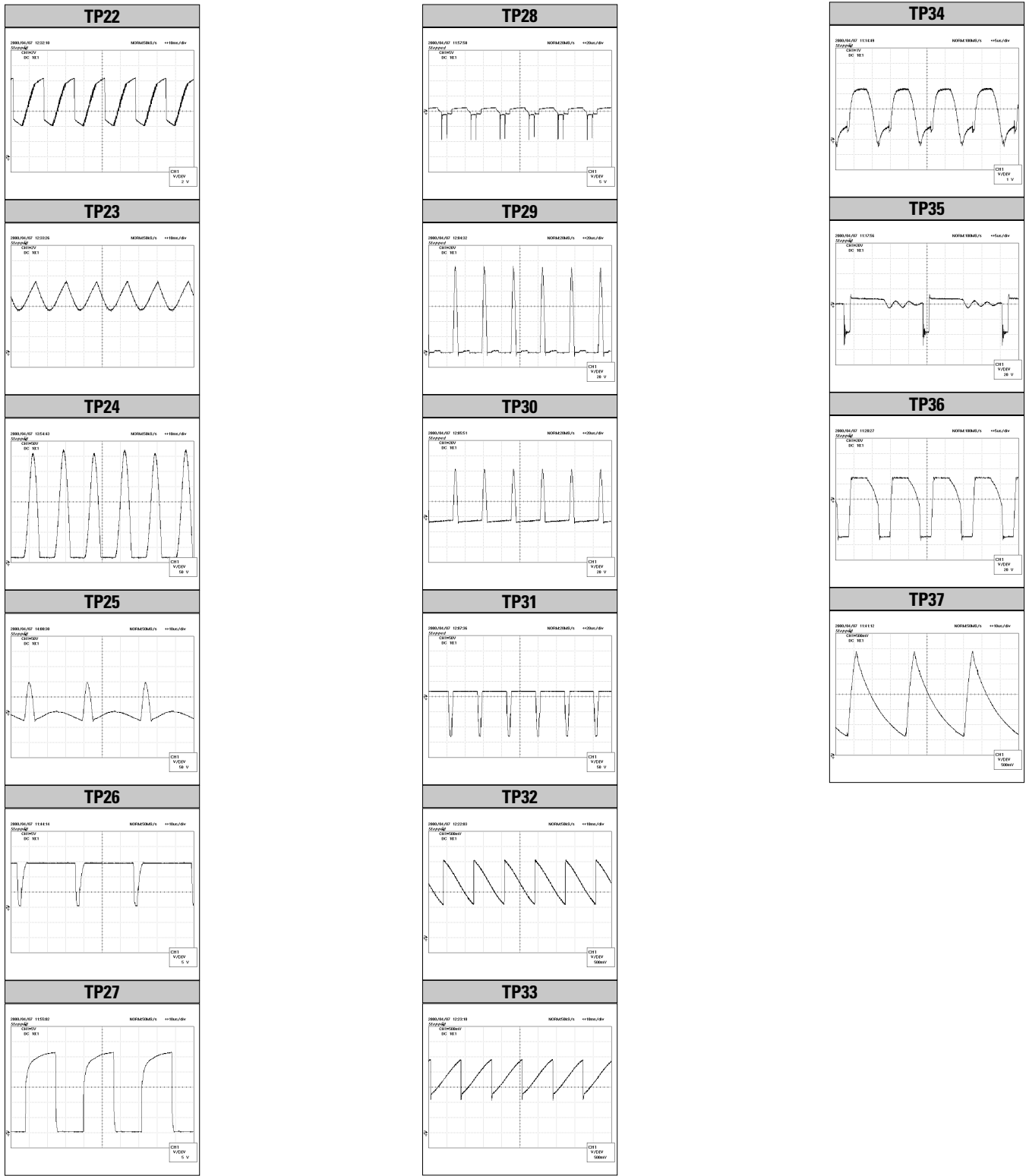








8-8-1 POWER WAVEFORMS





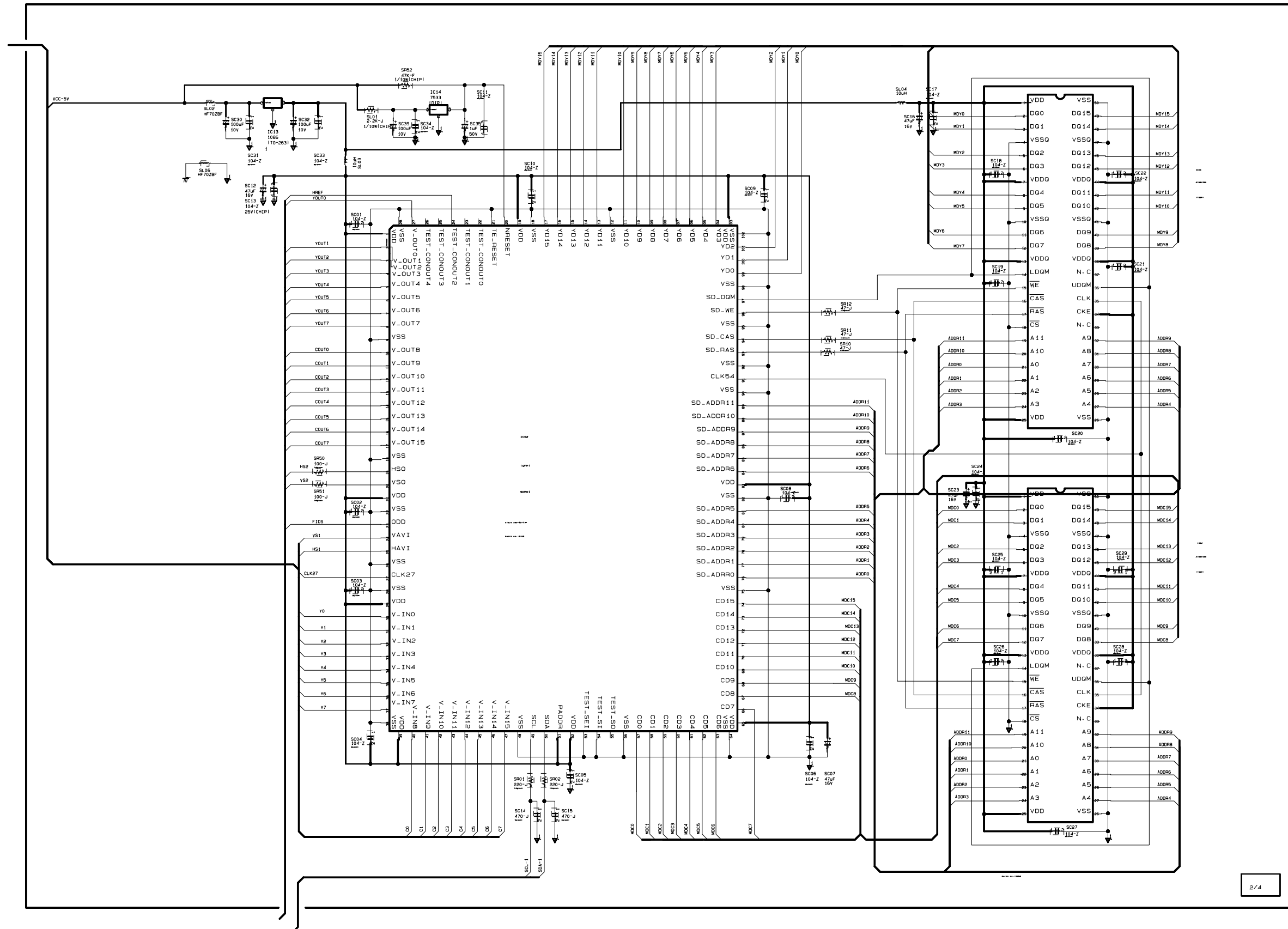






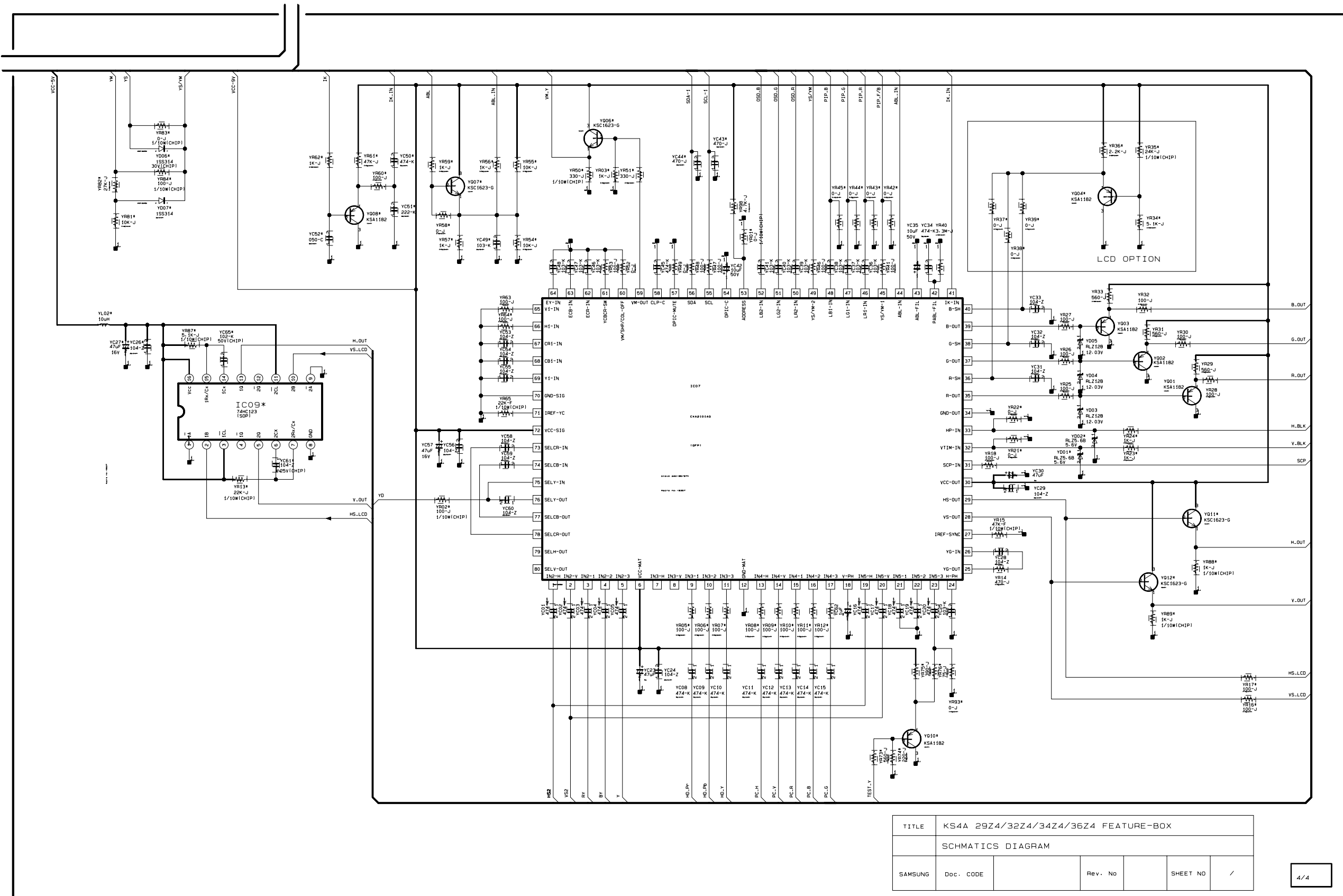


**8-12 F-BOX(2/4)**





8-14 F-BOX(4/4)



1	2	3	4	5	6	7																			
E																									
D																									
C																									
B																									
A	<table border="1"> <tr> <td>TITLE</td> <td colspan="5">KS4A 29Z4/23Z4/34Z4/36Z4 ASSY-SIDE AV</td> </tr> <tr> <td colspan="6">SCHMATICS DIAGRAM</td> </tr> <tr> <td>SAMSUNG</td> <td>Doc. CODE</td> <td></td> <td>Rev. No</td> <td>00</td> <td>SHEET NO</td> <td>1 / 1</td> </tr> </table>						TITLE	KS4A 29Z4/23Z4/34Z4/36Z4 ASSY-SIDE AV					SCHMATICS DIAGRAM						SAMSUNG	Doc. CODE		Rev. No	00	SHEET NO	1 / 1
TITLE	KS4A 29Z4/23Z4/34Z4/36Z4 ASSY-SIDE AV																								
SCHMATICS DIAGRAM																									
SAMSUNG	Doc. CODE		Rev. No	00	SHEET NO	1 / 1																			